REQUEST FOR PROPOSAL (RFP)

FOR

Statewide Traffic Operations Center

Video Wall System

RFP #272210

Issued by:

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
Division of Transportation System Development
Bureau of Traffic Operations

Proposals must be submitted
No later than 2:00 PM CT
April 29, 2014
Important: See building security access restrictions in Section 2.3

LATE PROPOSALS WILL BE REJECTED
There will not be a public opening for this RFP

For further information regarding this
RFP contact Melissa Viken
At (608) 266-0709
Email: melissa.viken@dot.wi.gov

Issued: April 3, 2014

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1 GENERAL INFORMATION

1.1 Introduction

The purpose of this document is to provide interested parties with the information necessary to prepare and submit a proposal for providing a new WisDOT Statewide Traffic Operations Center (STOC) Video Wall and Video Wall Management System. Together, the Video Wall, Video Wall Management System, and all other items included in this contract will be referred to as the System (System). This Request for Proposal (RFP) includes the procurement of a new Video Wall to replace the existing video wall in the STOC control room. The selected Vendor will also be responsible for the proper disposal of the existing video wall. The new Video Wall will be comprised of either Flat Panel Display Units or Rear Projection Cubes. All proposals should include the development of any and all construction documents that are required for installation of the video wall and the acquisition of any building permits, including any application or permit fees, required for installation or construction of the video wall. The procurement also includes several peripheral Flat Panel Display Units, a Video Wall Management System that will manage the Video Wall and the peripheral Flat Panel Display Units, and an Audio System. Also included in this procurement is Vendor provided services related to training, support, and maintenance of the items procured under this contract.

The State, as represented by WisDOT, intends to use the results of this RFP to award a contract(s) for the above listed System. The contract administrator will be determined at the time the contract is awarded.

The Wisconsin Department of Transportation (WisDOT) Purchasing Unit is the sole point of contact for the State of Wisconsin (State) during the entire selection and award process. **The person responsible for managing the procurement and award process is Melissa Viken (see contact information below). Contact with anyone else involved with this process without the prior authorization of the WisDOT Purchasing Unit may result in the disqualification of your proposal.**

WisDOT Purchasing Unit Contact
Name: Melissa Viken
Phone: (608) 266-0709
Email: melissa.viken@dot.wi.gov

1.2 Definitions

The following definitions are used throughout the RFP:

- AC means Alternating Current
- Agency means the Wisconsin Department of Transportation
- ATMS means Advanced Traffic Management System
- ATP means Acceptance Test Procedure
- BAFO means Best and Final Offer
- BTO means the Bureau of Traffic Operations
- Contractor means a company or individual submitting a proposal in response to this RFP
- Department means the Wisconsin Department of Transportation
- DisplayPort means a digital display interface
- DLP means Digital Light Processing
- DOT means the Wisconsin Department of Transportation
- DVB means a Disabled Veteran-Owned Business as certified by the Wisconsin Department of Commerce under S. 560.0335(3)

- DVI-D means a digital video display interface
- Engineer means the WisDOT representative responsible for overseeing the project
- HDMI means High-Definition Multimedia Interface
- HDD means hard disk drive
- IPS means In-Plan Switching
- IR means Infra-Red
- LAN means Local Area Network
- LCD means Liquid Crystal Display
- LED means Light Emitting Diode
- MBE means a Minority Business Enterprise as certified by the Wisconsin Department of Commerce under S. 560.036(2)
- MTBF means Mean Time Before Failure
- Proposer means a company or individual submitting a proposal in response to this RFP
- RAM means random-access memory
- RAID means redundant array of independent disks
- RFP means Request for Proposal
- ROM means Read-Only Memory
- RS-232 means a serial binary single-ended data and control signal connection
- State means the State of Wisconsin
- STOC means the WisDOT Statewide Traffic Operations Center in Milwaukee, Wisconsin
- System means Video Wall, Video Wall Management System, and any other items procured under this contract
- USB means universal serial bus
- Vendor means a company or individual submitting a proposal in response to this RFP
- VGA means Video Graphics Array
- WisDOT means the Wisconsin Department of Transportation

1.3 Project scope

WisDOT desires to establish a contract(s) for the procurement of a Video Wall, Video Wall Management System, Audio System, and several other related items. The proposal includes acquisition and procurement of the following items, which collectively will comprise the System:

- Video Wall
- Flat Panel Display Units for Video Wall*
- Rear Projection Cube for Video Wall*
- Flat Panel Display Unit for Standalone Display
- Flat Panel Display Unit for Workstation
- Video Wall Management System
- Control Room Audio System
- System Service, Support, and Maintenance

*Note: Specifications for a Flat Panel Display Unit and a Rear Projection Cube has been included in this RFP. The Vendor must provide a Video Wall made up entirely of either Flat Panel Display Units or Rear Projection Cubes, not both. Vendors may submit multiple proposals if they wish to submit a proposal for each option.

The selected Vendor(s) will be required to coordinate with WisDOT personnel, consultants, and contractors, as well as CB Richard Ellis (CBRE), the building facilities management company. All effort

and funding required by the selected Vendor for coordination with the above mentioned personnel is to be included in the cost provided for the System.

All materials procured and services performed under this Contract shall be completed in accordance with the requirements included in this document. All Vendors are to retain a copy of this document; if awarded this contract, the requirements included in this document will become the contract terms and conditions.

Conditions of the contract that include the word "must" or "shall" describe a mandatory requirement. All specifications are defined as mandatory minimum requirements unless otherwise stated. Failure to meet a mandatory requirement may result in proposal disqualification. Other State Agencies may also utilize this RFP for procurement products and/or services included in the contract.

1.4 Calendar of events

Listed below are the specific dates and times for actions related to this RFP. The actions with specific dates must be completed as indicated unless otherwise changed by WisDOT. In the event that WisDOT finds it necessary to change any of the specific dates and times identified below, it will do so by issuing an amendment to the RFP.

DATE	EVENT
April 3, 2014	RFP Issue Date
April 15, 2014	**Mandatory Pre-Proposal Conference and Site Visit**
April 17, 2014	Last day for proposers to submit questions (5:00 p.m. CT)
April 22, 2014	Answers to Questions and any RFP Amendments posted
April 29, 2014	**All proposals due on or before 2:00 p.m. CT**
May 13, 2014	**Vendor Presentations (if required)**

1.5 Pre-proposal conference

A mandatory Pre-Proposal Conference will be held on April 15, 2014 at 10:00 AM at the WisDOT STOC which is located at 433 West St. Paul Avenue, Suite 300, Milwaukee, WI 53203. **All vendors that submit a proposal as the primary Vendor or contractor will be required to attend the Pre-Proposal Conference.** Subcontractors and those not submitting as the primary vendor or company on a proposal are not required to attend the Pre-Proposal Conference. Prospective proposers should contact Melissa Viken at (608) 266-0709 if requiring any special arrangements for the Pre-Proposal Conference.

The Pre-Proposal Conference will include a tour of the STOC and the existing Video Wall and Video Wall Management System. Prospective proposers should carefully inspect the STOC and Video Wall prior to submitting a proposal to determine all requirements associated with the contract. Failure to do so will in no way relieve the successful proposer from providing, without additional cost to WisDOT, all necessary equipment or services that may be required to carry out the intent of the resulting contract. Any questions resulting from the site visit must be submitted in writing no later than April 17, 2014.

1.6 Reasonable accommodations

WisDOT will provide reasonable accommodations, including providing informational material in an alternative format, for qualified individuals with disabilities upon request. If you think you will need additional accommodations, contact Melissa Viken with the WisDOT Purchasing Unit at (608) 267-0709 (voice) or the Wisconsin Telecommunications Relay System (TTY) at (800) 947-3529.

1.7 Clarifications and revisions to the RFP

Any questions concerning this RFP must be submitted in writing on or before April 17, 2014 at 5:00 p.m. CT to Melissa Viken, WisDOT Purchasing Unit (Email: melissa.viken@dot.wi.gov). Contact with any other

Department or State employee(s) concerning this RFP is prohibited, except as authorized by the RFP manager during the time period beginning on the date of release of the RFP and ending after the notice of intent to award the contract is released.

Vendors are expected to raise any questions, exceptions, or additions concerning this RFP document during this stage of the RFP process. If a Vendor discovers any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in the RFP, the Vendor is to notify the above named individual of such error immediately and request a modification or clarification to the RFP. In the event that it becomes necessary to provide additional clarifying information, or to revise any part of this RFP, revisions, amendments, and/or supplements will be provided to all recipients of the initial RFP. Each proposal shall stipulate that it is predicated upon the requirements, terms, and conditions included in this RFP and any supplements or revisions thereof.

1.8 Contract term and funding

The contract shall be effective on the date indicated on the purchase order issued for this contract and will continue for one year from that date. By mutual agreement of the Agency and the Vendor, the contract may be renewed for up to seven (7) additional one year periods for a maximum potential contract duration of eight years.

1.9 New or deleted items

WisDOT reserves the right to add new products to this contract based on technology changes or changes to standards unknown at the time of this bid. Vendor(s) prices must be comparable to current contract pricing for similar products. The Vendor must promptly notify the WisDOT Purchasing Department of new or discontinued products. WisDOT reserves the right to delete any items from the contract.

1.10 Minority Business Enterprise (MBE)

The Wisconsin Department of Transportation is committed to the promotion of minority businesses in the State's purchasing program. Authority for this program is found in Wisconsin Statutes 15.107(2), 16.75(3m), and 16.755.

Bidders who feel that they qualify, should seek certification from the Wisconsin Department of Administration, Wisconsin Supplier Diversity Program, and mark "yes" on page 2 of the RFB. Details of program certification are located at: https://wisdp.wi.gov/.

Bidders are strongly urged to use due diligence to further this policy by setting up subcontracts to state-certified Minority Business Enterprises (MBE) and/or by using such enterprises to provide goods and services incidental to this contract (second-tier suppliers), with a goal of awarding 5% of the contract cost to such enterprises. An MBE means a business certified, or certifiable, by the Wisconsin Department of Administration under Statute 560.036(2).

Bidders must submit the attached **WisDOT MBE / DVB Program Awareness, Compliance & Action Plan (Attachment C)** indicating their proposed utilization of state-certified minority businesses for this contract. Contact the State's Minority Business Manager for assistance in locating certified firms at (608) 267-9550. A listing of State of Wisconsin certified minority businesses, as well as the services and commodities they provide, is on the State-certified MBE web site: https://wisdp.wi.gov/Search.aspx.

1.11 Disabled Veteran-Owned Business

Wisconsin statutes support purchasing goods/service from Disabled Veteran-owned businesses located in Wisconsin. Bidders are strongly urged to use due diligence to further this policy by setting up subcontracts to state-certified Disabled Veteran-Owned Businesses (DVB) and/or by using such enterprises to provide goods and services incidental to this contract (second-tier suppliers), with a goal

of awarding 5% of the contract cost to such enterprises. A DVB means a business certified, or certifiable, by the Wisconsin Department of Administration (DOA), Wisconsin Supplier Diversity Program under Statute 16.283 (3).

"Disabled veteran" means a person who is verified by the Department of Veterans Affairs as being all of the following at the time the person applies for certification:

1. A veteran as defined in s. 45.01(12),
2. A resident of this state, and
3. A person who is in receipt of an award from the U.S. Department of Veterans Affairs of a service–connected disability rating under 38 USC 1114 or 1134 of at least 30%.

Bidders who feel that they qualify, should seek certification from the Wisconsin DOA and mark "yes" on page 2 of the RFB. Details of program certification are located at: https://wisdp.wi.gov/.

Monthly reports (Attachment D) are requested to be submitted to WisDOT's Purchasing Unit, itemizing the deliveries and cost of items or services provided by certified DBV firms. Reports should state the costs for the previous contract month. Any use of DVB firms can be reported via e-mail to DOTTIPSCorrespond@dot.wi.gov. WisDOT reserves the right to verify with listed firms their involvement as subcontractors or second-tier suppliers.

1.12 Certification for collection of state sales and use tax

The State of Wisconsin shall not enter into any contract with a Vendor, and reserves the right to cancel any existing contract with a Vendor, if the Vendor has not met or complied with the requirements of Statute 77.66 of the State of Wisconsin and any other related statutes regarding certification for collection of State Sales and Use Tax.

1.13 VendorNet registration

The State of Wisconsin's purchasing information and vendor notification service is available to all businesses and organizations that want to sell to the state. Anyone may access VendorNet on the Internet at http://vendornet.state.wi.us to get information on state purchasing practices and policies, goods and services that the state buys, and tips on selling to the state. Vendors may use the same website address for inclusion on the bidders list for goods and services that the organization wants to sell to the state. A subscription with notification guarantees the organization will receive an email message each time a state agency, including any campus of the University of Wisconsin System, posts a request for bid or a request for proposal in their designated commodity/service area(s) with an estimated value over $50,000. Organizations without Internet access receive paper copies in the mail. Increasingly, state agencies also are using VendorNet to post simplified bids valued at $50,000 or less. Vendors also may receive email notices of these simplified bid opportunities. If questions exist about VendorNet, call the VendorNet Information Center at 1 (800) 482-7813 or, for Madison area organizations; call (608) 264-7898.

Also, register for WisDOT's vendor database by accessing our Purchasing web site: www.dot.wisconsin.gov/business/purchase/index.htm or by contacting via email: mailto:tipscorrespondence.dbm@dot.wi.gov

2 PREPARING AND SUBMITTING A PROPOSAL

2.1 General instructions

The evaluation and selection of a contractor will be based on the information submitted in the proposal plus references and any required on-site visits, interviews/presentations or demonstrations. Proposers

should respond clearly and completely to all RFP requirements. Failure to respond to each of the requirements included in the RFP may be the basis for rejecting a proposal. **Elaborate proposals (e.g. expensive artwork), beyond that sufficient to present a complete and effective proposal, are not necessary or desired.** WisDOT encourages all proposers to print their submission double-sided to save paper.

2.2 Incurring costs

The State of Wisconsin is not liable for any costs incurred by proposers in replying to this RFP.

2.3 Submitting proposals

Proposers must submit, in a sealed package, **one original (clearly identify), one electronic version (on CD, DVD, or USB flash drive), and five copies** of all materials required for acceptance of their proposal **on or before 2:00 p.m. CT, April 29, 2014** to:

U.S. Mail:
Purchasing Unit
Wisconsin Department of Transportation
4802 Sheboygan Ave., Room 751
P.O. Box 7396
Madison, WI 53707-7396

UPS, Fed Ex, etc.:
Purchasing Unit
Wisconsin Department of Transportation
4802 Sheboygan Ave., Room 751
Madison, WI 53705

A proposer may also hand deliver their proposal package on or before the date and time listed above. **Because of increased building security, access to the WisDOT Purchasing Office is restricted and may cause delay if hand delivering your proposal. Allow ample time for security clearance to Room 751 when hand delivering a proposal.**

All proposals must be time-stamped by the WisDOT Purchasing Office by the stated time. Proposals not so stamped will not be accepted. Receipt of the proposal by the State mail system does not constitute receipt of the proposal by the WisDOT Purchasing Office.

WisDOT does not accept facsimile machine or email submitted proposals. All proposals must be packaged, sealed, and show the following information on the outside of the package:

- Proposer's Name and Address
- Request for Proposal Title
- Request for Proposal Number
- Proposal Due Date

COST PROPOSAL: Submit one original plus one copy (Refer to Attachment D). Seal in an envelope and submit within the proposal package. The outside of the envelope must clearly state “Cost Proposal” and the name of proposer.

2.4 Proposal organization and format

Proposals should be typed and submitted on 8.5 by 11 inch paper and bound securely with page numbers clearly indicated.

Proposers responding to this RFP must comply with the following format requirements:

a) Tab 1 - COVER LETTER, RFP SIGNATURE PAGES, DESIGNATION OF CONFIDENTIAL & PROPRIETARY INFORMATION FORM, and PROPOSER INFORMATION SHEET: Include here any cover letter, the RFP signature pages one & two, any addendum/amendment signature pages, the designation of confidential and proprietary information form found in the front section of

the RFP, completed Attachment A – Proposer Information Sheet found at the back of this RFP, and the Vendor Agreement form.

Proposals submitted in response to this RFP must be signed by the person in the proposer's organization who is responsible for the proposal submittal, including prices. Each proposal shall stipulate that it is predicated upon the requirements, terms, and conditions of this RFP and any addendums/amendments thereof.

b) Tab 2 - FINANCIAL STABILITY DOCUMENTATION: (Only provide if specifically requested by WisDOT). Proposers responding to this RFP must be able to substantiate their financial stability by submitting either a letter from proposer's bank or auditor verifying financial stability. Do not submit financial statements/documents. The State may request additional reports on financial stability from an independent financial rating service in order to further substantiate stability. Also, include here completed Site Visit Verification form (to be distributed at the mandatory site visit on April 15th).

c) Tab 3 - RESPONSE TO PROPOSER INFORMATION AND SOLUTIONS: (**Total page limit of 25 pages including appendices**). Responses to the requirements in the proposer information and solutions must be in the same sequence and numbered as they appear in this RFP. Include here completed Attachment B – References Sheet found at the back of this RFP.

d) Tab 4 - WISDOT MINORITY BUSINESS ENTERPRISE (MBE) PROGRAM AWARENESS, COMPLIANCE & ACTION PLAN: Proposers must detail their action plan for potential MBE subcontracts and/or MBE second-tier agreements. Include completed Attachment C found at the back of this RFP.

e) Separate Envelope: COST PROPOSAL – Attachment D of the RFP (**total page limit of 10 pages including appendices**). Provide cost information as detailed in Section 6.0 of this RFP. All costs, as requested, for furnishing the product(s) and/or service(s) must be included in this proposal. The cost proposal must NOT be listed in any other part of the proposal response.

2.5 Multiple proposals

Multiple proposals from a proposer will be permissible; however each proposal must conform fully to the requirements for proposal submission. Each such proposal must be separately submitted and labeled as Proposal #1, Proposal #2, etc. on each page included in the response.

2.6 Withdrawal of proposals

Proposals shall be irrevocable until contract award unless the proposal is withdrawn. Proposers may withdraw a proposal, in writing, at any time up to the proposal due date and time or upon expiration of 180 days after the due date and time. The written withdrawal notice must be received by the Purchasing Agent or Purchasing Supervisor managing this RFP process. The notice must be signed by an authorized representative of the proposer. If a previously submitted proposal is withdrawn before the proposal due date and time, the proposer may submit another proposal at any time up to the proposal due date and time.

3 PROPOSAL SELECTION AND AWARD PROCESS

3.1 Evaluation committee

WisDOT's evaluation committee will consist of members who have been selected because of their special expertise and knowledge of the service(s) and/or product(s) that are the subject of this RFP. Proposers may not contact members of the evaluation committee except at the direct request of WisDOT.

3.2 Preliminary evaluation

All proposals will be reviewed to determine if the mandatory contract requirements are met. Conditions of the contract that include the word “must” or “shall” describe a mandatory requirement. All specifications are defined as mandatory minimum requirements unless otherwise stated. In the event that all proposers do not meet one or more of the mandatory requirements, WisDOT reserves the right to continue the evaluation of the proposals that most closely meet the mandatory requirements of this RFP.

3.3 Right to reject proposals

The Department reserves the right to reject any and all proposals submitted in response to this RFP.

3.4 Contract quantities

The Department does not guarantee the purchase of any specific bid item quantities. Any proposals that state that the Department must guaranty to purchase a specific quantity or dollar amount may be disqualified.

3.5 Proposal scoring

Accepted proposals will be reviewed by an evaluation committee and scored against the stated criteria. The committee may review references, request interviews/presentations, conduct demonstrations and/or conduct on-site visits. The resulting information will be used to score the proposals. Proposals from state-certified MBE and DVB may have points weighted by a factor of 1.00 to 1.05 to provide up to a five percent (5%) preference to these businesses. The evaluation committee's scoring will be tabulated and proposals ranked based on the numerical scores received.

3.6 Evaluation criteria

The proposals will be scored using the following criteria:

	Description	**Points**	
A.	Proposer Information (Section 5.1 to 5.3)		120
	Proposer History, Experience, and Capabilities	60	
	System History	20	
	Proposer Project References	40	
B.	Desired System Functionality (Section 5.4 to 5.15)		560
	Video Wall and Support Structure	60	
	Flat Panel Display Units/Rear Projection Cubes	120	
	Flat Panel Display Unit for Standalone Display	20	
	Flat Panel Display Unit for Workstation	20	
	Video Wall Management System	140	
	Control Room Audio System	20	

	Project Schedule and Delivery Times	40	
	System Service and Support Program	40	
	Overall System Reliability	40	
	Overall System Energy Consumption	20	
	Acceptance Test Procedure	20	
	Value Added Solutions	20	
C.	Cost Proposal (Section 6.0)		280
D.	Overall Clarity and Quality of Proposal		40
	TOTAL		1000

3.7 Proposer shortlist

Top-scoring proposers, based on an evaluation of the written proposal, may be selected by the Department for further analysis. Additional analysis, if required, may include proposer interviews, presentations, demonstrations, field studies, reference checks, and/or analysis of any other pertinent proposer information. If WisDOT opts to utilize a shortlist as part of the RFP selection process, the number of proposers to be shortlisted will vary based on the total number of proposers and the proximity of written proposal evaluation scores.

3.8 Interviews, presentations, and demonstrations

If requested by the Department, top-scoring proposers (based on an evaluation of the written proposal) may be required to participate in interviews, presentations, or demonstrations to support and/or clarify their proposal. The State will make every reasonable attempt to schedule each interview, presentation, or demonstration at a time and location that is agreeable to the proposer. Failure of a proposer to complete a scheduled interview/presentation with the State may result in rejection of that proposer's proposal. WisDOT may conduct site visits of the proposer and/or proposer's references' facilities to clarify or confirm information included in the proposal.

3.9 Final evaluation

Upon completion of any interviews, presentations, or demonstrations the WisDOT evaluation team will review prior evaluations and make any adjustments to the requirements scores based on the information obtained during the final evaluation process, reference checks, as well as any other pertinent proposer information.

3.10 Award and Best and Final Offers (BAFO)

Award will be granted in one of two ways. The award may be granted to the highest scoring responsive and responsible proposer(s) after the original evaluation process is complete. Alternatively, the highest scoring proposer(s) may be requested to submit a Best and Final Offer (BAFO). If WisDOT requests a BAFO, the proposals will be reevaluated against the stated criteria, scored, and then ranked by the evaluation committee. The award will then be granted to the highest scoring proposer(s) following that process. Proposers should not expect WisDOT to request a BAFO prior to contract award.

3.11 Notification of intent to award

All proposers who respond to this RFP will be notified in writing of WisDOT's intent to award the contract(s) as a result of this RFP. After notification of the intent to award is made, and under the supervision of agency staff, copies of proposals will be available for public inspection from 7:30 a.m. to 3:30 p.m., in the WisDOT Purchasing Section, Room 751, 4802 Sheboygan Avenue, Madison, Wisconsin.

Proposers should make appointments to ensure that space and time are available for the review. Contact the Purchasing Agent managing this RFP process to schedule an appointment.

3.12 Multiple Contract Awards

WisDOT reserves the right to award this contract to multiple Vendors provided all of the Vendors receiving a contact each meet all of the requirements included in the RFP. Vendor proposals and/or pricing contingent on the number of contracts awarded from this RFP will be rejected.

3.13 Appeals process

The appeals process applies only to those requests for proposal for services that result in a contract greater than $50,000. Notices of intent to protest and protests must be formally made in writing. Protestors should make their protests as specific as possible and should identify Wisconsin Statutes and Wisconsin Administrative Code provisions that are alleged to have been violated.

The written notice of intent to protest the intent to award a contract must be filed with Mark Gottlieb, P.E., Secretary, Wisconsin Dept. of Transportation, 4802 Sheboygan Avenue, PO Box 7910, Madison, WI 53707, phone number 608-266-1114, facsimile number 608-266-9912, and received in his office no later than five (5) working days after the notice of intent to award is issued.

The written protest must be received in his office no later than ten (10) working days after the notice of intent to award is issued.

The decision of the head of the procuring agency may be appealed to the Secretary of the Wisconsin Dept. of Administration within five (5) working days of issuance, with a copy of such appeal filed with the procuring agency. The appeal must allege a violation of a Wisconsin Statute or a provision of the Wisconsin Administrative Code.

3.14 Negotiate contract terms

The Department reserves the right to negotiate the terms of the contract, including the award amount, with the selected proposer(s) prior to entering into a contract. If contract negotiations cannot be concluded successfully, the Department reserves the right to reject the proposal.

4 MANDATORY CONTRACT REQUIREMENTS

Submit all response information for this section within Tab 3 of the Vendor proposal. Refer to Section 2.4 of this RFP for information on proposal submittal format requirements**.** The requirements identified in this section are mandatory and the proposer must satisfy them as a pass/fail pre-screening requirement. Any proposal submitted not in compliance with any of the mandatory requirements may be disqualified, rejected, not evaluated, and/or not scored.

4.1 Vendor History

The Vendor or Contractor proposing the Video Wall and Video Wall Management System must have been in business supplying and integrating Video Walls and Video Wall Management Systems for a minimum of four years with details provided upon request.

☐ Have Read, Understand, and Will Comply ☐ Will Not Comply

4.2 System hardware and software licenses

The Vendor is to provide all of the necessary hardware and software licenses required for the Video Wall and Video Wall Management System. The cost of all hardware or software, including all licenses, should be included in the cost sheet. All licensing fees/costs should be one-time costs and should be good for the life of the System.

☐ Have Read, Understand, and Will Comply ☐ Will Not Comply

5 PROPOSER INFORMATION AND SOLUTIONS

Submit all response information for this section within Tab 3 of the Vendor proposal. Refer to Section 2.4 of this RFP for information on proposal submittal format requirements

5.1 Proposer history, experience, and capabilities

Describe the organization/company's history relative to providing similar products to those being procured under this contract. Outline the organization/company's experience and capabilities providing similar products and services to those being procured under this contract. Do not include specific and/or detailed project deployment information in this section; this information is to be included in the Project References section of the proposal.

5.2 System history

Describe the history of the solution or System being provided under this contract. Outline the evolution of the product over time and any major iterations/versions of the product. Identify any planned or future upgrades to the solution or System being provided under this contract. Do not include specific and/or detailed project deployment information in this section; this information is to be included in the Project References section of the proposal.

5.3 Proposer project references

Proposer must include in their proposal a list of project references (minimum of three and no more than four) that the proposer has completed. The proposer will need to identify the organization and/or client for which the project was completed. Each project must have been completed within the last three years and be of a similar nature to that required by this solicitation. No more than one project is to be included for any one organization and/or client. Include a point of contact (person's name, company name, address, telephone number, and email address) and a description for each project that was the basis for the business relationship. The point of contact should be fluent in English. A completed Attachment B – References Sheet will be considered part of the formal response to this section. Potential Subcontractors and/or WisDOT staff cannot be considered as references.

If the Vendor is supplying a Video Wall from a different company or manufacturer, at least one reference must be for a deployment that utilizes a Video Wall from the same company or manufacturer that is being proposed as part of this contract. If the Vendor is supplying a Video Wall Management System from a different company or manufacturer, at least one reference must be for a deployment that utilizes a Video Wall Management System from the same company or manufacturer that is being proposed as part of this contract.

The Department will determine which, if any, references to contact and/or visit to assess the quality of work performed, the personnel assigned to the project, and/or to see the product in use. The proposer will not be present during any reference checks and/or site visits. If contacted, all references will be asked to verify that a high level of satisfaction was provided. WisDOT may also utilize other pertinent sources of information regarding the products and/or services provided by the proposer.

5.4 Video wall and support structure

Describe the Video Wall that will be procured under this contract. Describe how the Video Wall meets and/or exceeds the minimum specifications outlined in this contract. Identify any features and/or functionality of the Video Wall and provide detailed specifications for the Video Wall. Outline the process to repair the Video Wall should maintenance or repair be required and the time frame to complete the repairs and/or replacement.

Describe the support structure or wall that will be installed and/or constructed as part of this contract to support the Video Wall in the STOC control room. Identify all construction drawings and permits that will be required and provided for the Video Wall included in the proposal response. Indicate how air will be circulated between the control room and the area behind the video wall. Ventilation between the two areas should include a disposable filter that can be easily replaced.

5.5 Flat panel display units/rear projection cubes

Describe the Flat Panel Display Units or the Rear Projection Cubes that will be procured under this contract to complete the Video Wall. Describe how the Flat Panel Display Units or Rear Projection Cubes meet and/or exceed the minimum specifications outlined in this contract. Identify any features and/or functionality of the Flat Panel Display Units or Rear Projection Cubes. Identify how the Flat Panel Display Units or Rear Projection Cubes will be connected to the Video Wall Management System. Provide detailed specifications for the Flat Panel Display Units or Rear Projection Cubes. If available, provide Mean Time before Failure (MTBF) calculations. Provide any available information on the overall reliability of the Flat Panel Display Units or Rear Projection Cubes. Outline the process to repair or replace a Flat Panel Display Unit or Rear Projection Cube should a component fail and the time frame to complete the repairs and/or replacement.

5.6 Flat panel display units for standalone display

Describe the Flat Panel Display Units for standalone display that will be procured under this contract. Describe how the Flat Panel Display Units meet and/or exceed the minimum specifications outlined in this contract. Identify any features and/or functionality of the Flat Panel Display Units. Provide detailed specifications for the Flat Panel Display Units. Outline the process to replace a Flat Panel Display Unit should it fail and the time period to complete the replacement.

5.7 Flat panel display units for workstation

Describe the Flat Panel Display Units for workstations that will be procured under this contract. Describe how the Flat Panel Display Units meet and/or exceed the minimum specifications outlined in this contract. Identify any features and/or functionality of the Flat Panel Display Units. Provide detailed specifications for the Flat Panel Display Units. Outline the process to replace a Flat Panel Display Unit should it fail and the time period to complete the replacement.

5.8 Video wall management system

Describe the Video Wall Management System that will be procured under this contract to manage the Video Wall. Describe how the Video Wall Management System meets and/or exceeds the minimum specifications outlined in this contract. Identify any features and/or functionality of the Video Wall Management System. Identify how the Flat Panel Display Units or Rear Projection Cubes will be connected to the Video Wall Management System. Provide detailed specifications for the Video Wall Management System and Mean Time before Failure (MTBF) calculations. Provide any available information on the overall reliability of the Video Wall Management System. Outline the process to repair or replace the Video Wall Management System should a component fail and the time frame to complete the repairs and/or replacement.

Describe any software that will be provided as part of the Video Wall Management System. Identify the licensing requirements and any costs associated with the software. If updates to the software become available, describe how they would be incorporated. Describe how the Video Wall Management System meets and/or exceeds the minimum specifications outlined in this contract. Identify any features and/or functionality of the Video Wall Management System. Outline the software deployment history and evolution of the software throughout the organization/company's history as well all plans for future software development and enhancements. Any software provided as part of this contract must have

been marketed and deployed under field conditions for a minimum of one year with details provided to WisDOT upon request.

5.9 Control room audio system

Describe the Control Room Audio System that will be procured under this contract (See Attachment K). Describe how the audio system meets or exceeds the minimum specifications included in this contract. While it is preferred the audio system is integrated into the Video Wall and Video Wall Management System, it is not required.

5.10 Project schedule and delivery times

As part of the proposal, the Vendor must submit documentation outlining the anticipated project schedule from the time the Vendor is awarded the contract by the Department to final acceptance of the Video Wall and Video Wall Management System by the Department.

The schedule should include the delivery time for all items procured under this contact. Delivery time should be given in business days and based on the total time between Vendor receipt of the order from the Department and receipt of the hardware by Department. The delivery times identified by the Vendor will become the required delivery time for the contract if awarded to that proposer. Please note that the selected Vendor will be allowed a maximum of fourteen (14) consecutive calendar days from the time the existing system is taken out of operation until the time the new System is installed, integrated, and fully functional.

5.11 System service and support program

Describe the service and support program provided for all hardware and software procured under this contract. The description should include service and support provided by the Vendor during the warranty period, during each optional year of contracted service and support with the Vendor, and any differences between the warranty period and the yearly service and support period. Identify any maximum limits to the number of Vendor site visits, number of meetings attended by the Vendor, Vendor provided service and support hours, or other limits during each optional year of contracted service and support.

Identify the maximum response times required to be onsite to diagnose any problems, hardware failures, or software issues. Once hardware or software issues have been identified and diagnosed, identify the process that will be followed to resolve any issues and/or replace any failed hardware.

Identify the process to obtain firmware/software updates for any of the items procured under this contract if and when they become available. All new firmware and software will be provided to the Department free of charge. Identify the process by which the Vendor will update and/or install any new firmware or software. WisDOT may require the Vendor be onsite in order to complete a firmware or software upgrade.

5.12 Overall system reliability

Outline the overall reliability of the System being proposed by this contract. This should take into account the reliability of all hardware and software provided under this contract, the history of the manufacturers that will be supplying hardware or software under this contract, and the Vendor's history providing reliable products and integrated solutions. If available, provide any available Mean Time Before Failure (MTBF) calculations for the items procured under this contract. Identify which System components are proprietary and must be procured from the Vendor and which System components are non-proprietary and can be obtained from alternate sources.

5.13 Overall system energy consumption

If available, provide energy consumption information for all electrical items procured under this contract. If energy consumption varies depending on the display mode of an individual Flat Panel Display Unit or Rear Projection Cube, provide details on each display mode. Higher scores will be awarded to Vendors that provide systems that utilize less energy; no points will be awarded to Vendors that do not provide any energy consumption information.

5.14 Acceptance test procedure

As part of the response to this RFP, the Vendor must submit an Acceptance Test Procedure (ATP) that will be used to demonstrate all required functionality of the System, including all hardware and software, included in the RFP. If awarded the contract, WisDOT will work with the Vendor to make any necessary revisions and/or modifications to the ATP before being formally adopted by the Department for the project.

If, during the course of performing the ATP, Department staff determine that the System or any hardware/software performs unfavorably or fails any part of the acceptance test; the identified problems will need to be corrected at no additional expense to the Department. The Vendor will be required to correct all deficiencies observed during the ATP within 21 calendar days of notification of the deficiency by the Department. The Department will restart the ATP once all deficiencies have been sufficiently addressed. If the Vendor is again unable to demonstrate all of the functionality requirements identified in the ATP, the Department reserves the right to reject the Vendor's proposal.

5.15 Value added solutions

Value-Added Solutions are those System features and functionality above and beyond the mandatory features and functionality described in Section 4, Section 5, and Attachments G through L of this RFP. The Vendor is to provide a description for each Value-Added feature or function and clearly label it a "Value-Added Solution."

6 COST PROPOSAL

6.1 General instructions for the cost proposal and scoring

The cost proposal **must** be submitted in a separate envelope within the written proposal package. All prices must be quoted in U.S. Dollars.

The cost proposal will be scored by using a standard quantitative calculation where the most points will be awarded to the proposal with the lowest cost. Various costing methodologies are available to analyze the cost information submitted to determine the lowest cost. WisDOT will select one method and use it consistently throughout proposal analysis. The cost methodology will be available, by request from the Purchasing Agent, at the time the proposals are due.

The Purchasing Agent will score each cost proposal by prorating with the lowest cost proposal given the highest score. The formula is as follows: Calculation of points awarded to subsequent proposals will use the lowest dollar proposal amount as a constant numerator and the dollar amount of the firm being scored as the denominator. This number is then multiplied by the number of points given to the cost section of the RFP, resulting in the cost proposal score.

$$\frac{\text{Lowest Proposed Cost (constant)}}{\text{Proposer's Cost (varies according to proposal being scored)}} \times \text{Maximum Cost Evaluation Score} = \text{Score}$$

6.2 Format for submitting the Cost Proposal (Attachment D)

Submit one original plus one copy in a separate sealed envelope clearly marked as the Cost Proposal. Instructions for submission of the Cost Proposal can be found in Attachment D. If needed, include any additional pricing information on a separate sheet of paper and include it in the Cost Proposal.

6.3 Cost of System hardware and software licenses

The Vendor is to provide all of the necessary hardware and software licenses required for the Video Wall and Video Wall Management System. The cost of all hardware or software, including all licenses, should be included in the cost sheet. All licensing fees/costs should be one-time costs and should be good for the life of the System.

6.4 Fixed price period

All prices, costs, and conditions outlined in the proposal shall remain fixed and valid for acceptance for one hundred and twenty (120) days starting on the due date for proposals. The awarded Vendor(s) must hold the accepted prices and/or costs for the entire contract period. Any adjustment to prices and/or costs at the beginning of a contract renewal period will be negotiated between WisDOT and the Vendor. Price increase requests must be justified with supporting documentation of industry-wide increases. If WisDOT deems cost increases are not acceptable, it reserves the right to re-bid the contract in whole or part. Acceptance of the price increases shall be in writing.

If the Contractor's cost decreases during the term of the contract, the Contractor shall immediately notify WisDOT. Such cost decreases shall become effective to WisDOT the same date the decrease is effective to the contractor. If WisDOT is not properly notified of price decreases, the pricing at the time of order will be used for invoice payment and the vendor will provide refunds or credits as necessary.

7 SPECIAL TERMS AND CONDITIONS

7.1 Liquidated Damages

The selected Vendor will be allowed a maximum of fourteen (14) consecutive calendar days from the time the existing system is taken out of operation until the time the new System is installed, integrated, and fully functional. The Vendor will be liable for liquidated damages of two thousand five hundred dollars ($2,500.00) per calendar day for exceeding this existing system downtime requirement, subject to a maximum value of 10% of the total contract value.

7.2 Employee Identification

All Contractors' employees, while working on WisDOT property, must wear a clearly displayed photo identification badge (provided by the Contractor at the Contractor's expense) showing they are employees of the Contractor.

7.3 Confidentiality

Contractor acknowledges that some of the data and documentation it may become privy to in the performance of this contract is of a confidential nature. Contractor shall make all reasonable efforts to ensure that it or its employees and subcontractors do not disseminate such confidential information.

Contractor or its employees and subcontractors will not reuse, sell, or make use in any format the data researched or compiled for this contract for any venture, profitable or not, outside this contract.

Contractor agrees to observe complete confidentially with respect to all aspects of any confidential information, proprietary data and/or trade secrets and any parts thereof, whether such contents are the State's or the manufacturer's, bidder's, or distributor's whereby Contractor or any Contractor's personnel may gain access while engaged by the State or while on State premises.

The restrictions herein shall survive the termination of this contract for any reason and shall continue in full force and effect and shall be binding upon the Contractor or its agents, employees, successors, assigns, subcontractors, or any party claiming an interest in this contract on behalf of or under the rights of Contractor following any termination. Contractor shall advise all Contractors' agents, employees, successors, assigns and subcontractors which are engaged by the State of the restrictions, present and continuing, set forth herein. Contractor shall defend and incur all costs, if any, for actions that arise as a result of noncompliance by Contractor, its agents, employees, successors, assigns and subcontractors regarding the restrictions herein.

7.4 Insurance

The Vendor, at its own expense, shall carry and keep in force during the full term of this agreement, including any extensions or renewal thereof, a policy or policies of insurance which also name(s) the Department, its employee, agents or officers as additional insureds, in the amount and the types as follows:

A. Commercial General Liability insurance with limits of at least $1,000,000 per occurrence and $2,000,000 annual aggregate; and $2,000,000 products-completed operations coverage limit.
B. Workers' compensation insurance in a form and amount as required by state law.
C. Business Automotive Liability insurance covering ownership, operation and maintenance of all owned, non-owned and hired motor vehicles with limits of at least $1,000,000 per occurrence for bodily injury and property damage combined.

The Vendor shall furnish the Department with certificates of insurance evidencing such coverage. These certificates shall also provide that the insurance will not be modified or cancelled without prior written notice to the Department at least thirty (30) days prior to the effective date of the modification or cancellation. Vendor shall require the same minimum insurance requirements, as listed above, of all its contractors and subcontractors. Coverage must be placed with carriers with an A. M. Best rating of A or better.

Except where prohibited by law, all insurance policies shall contain provisions that the insurance companies waive the rights of recovery or subrogation, by endorsement to the insurance policies, against WisDOT, its subsidiaries, its agents, servants, invitees, employees, co-lessees, co-ventures' affiliated companies, contractors, subcontractors, and their insurers.

Failure by the Vendor to procure and maintain the insurance as set forth above shall be considered a default and cause for termination of the contract. Further, at least thirty (30) days prior to the expiration date or dates of expiring policies, certified copies of renewal, or new policies, or other acceptable evidence of adequate insurance shall be provided to the Contract Administrator.

7.5 Building Permits

The Vendor will be responsible for obtaining all necessary building permits required for construction and installation of the System. The Vendor will also be responsible for the cost of any permit fees that are required to obtain the necessary construction permits.

7.6 Coordination with WisDOT personnel, consultants, and STOC building facilities management

The selected Vendor will be required to coordinate with WisDOT personnel, consultants, and contractors as well as CB Richard Ellis (CBRE), the building facilities management company. All effort and funding required by the selected Vendor for coordination of the above mentioned personnel is to be included in the cost provided for the System. Any work required by the building management company for the System is not included in this contract and will be handled separately by the Department.

7.7 Warranty and support

The Vendor will warranty the hardware and software procured under this Contract for a minimum of two years or the time included in an individual specification for any System hardware or software, whichever is longer, from the date of WisDOT approval of the Acceptance Test Procedure associated with that particular item. The Vendor will repair and/or replace all hardware or software within five business days that fails to meet the required specifications outlined in this contract upon notification to the Vendor by WisDOT. Refer to individual hardware and software specifications included with this RFP for additional warranty information.

The Vendor is to provide troubleshooting service and support assistance for all hardware and software procured under this contract for the duration of the warranty period and any subsequent years WisDOT has an annual service and support contract with the Vendor. Refer to individual hardware and software specifications included with this RFP for additional service, and support information.

7.8 Hardware/software specification sheets, documentation, manuals, and instructions

The awarded Vendor will be responsible for providing the Department with a minimum of five hard copies of all product specifications, documentation, manuals, and instructions for the hardware and software procured under this Contract. The Vendor will also be responsible for providing the Department with an electronic document (in PDF format) of each of the aforementioned items. At a minimum this shall include the following hardware and software:

- Flat Panel Display Unit for Video Wall or Rear Projection Cube for Video Wall
- Flat Panel Display Unit for Standalone Display
- Flat Panel Display Unit for Workstation
- Video Wall Management System Hardware
- Video Wall Management System Software
- Control Room Audio System

7.9 System training

The Vendor shall have qualified instructors and provide all materials for training Department personnel and any WisDOT consultants and contractors in the operations of the Video Wall and Video Wall Management System. The Vendor shall develop and submit a training course outline and samples of all training aids and manuals to WisDOT personnel for approval at least thirty (30) days prior to the proposed date the new Video Wall and Video Wall Management System are fully operational. Written approval of this material shall be required prior to the final scheduling of the training sessions or the final production of training materials. Training shall not begin until after approval of the submitted training material.

The Vendor shall provide three training sessions for Department personnel and consultants. One training session will focus on administration and maintenance of the Video Wall and Video Wall Management System and the other two sessions will focus on operating the Video Wall and Video Wall Management System. All training sessions will be conducted at the WisDOT STOC. Training sessions shall consist of formal classroom lectures as well as “hands-on” training. “Hands-on” training shall consist of working with the actual Video Wall and Video Wall Management System. A training “session”

will consist of a minimum of three hours of training time. The attendance of each session will not be more than 12 people. These training sessions will include as appropriate, and as a minimum:

- Background on Video Wall and Video Wall Management System components
- Procedures for installing and setting up equipment and components
- Typical day-to-day operations and capabilities
- Basic configuration, troubleshooting, and fault determination procedures
- Preventive maintenance procedures and schedules

7.10 Design/shop drawings

Prior to the purchase and/or fabrication of any of the components listed herein and no more than 45 days after Contract Award, the Contractor shall submit five copies of design drawings and shop drawings as required to the Department for review. For reference, schematic drawings and pictures of the STOC control room and Video Wall are provided in Appendix E. At a minimum, the design/shop drawings shall consist of an installation plan that shows the following items:

- Video Wall Layout including any proposed modifications to existing facilities
- Structural Components of Video Wall
- Overall System Functional Schematic
- Electrical Layout (communication and power) and connection locations
- Auxiliary equipment

The Department will complete its review of the material and will advise the Contractor, in writing, as to the acceptability of the material submitted. The Department may determine that no exceptions were identified for the items and are therefore approved, in which case no further action is required by the Contractor; or the item may be partially or totally rejected, in which case the Contractor shall be required to modify and/or amend the submittal as required by the Department and resubmit the item within ten business days. At this time, the review and approval will begin again.

7.11 Subcontractors

The Vendor will be responsible for Contract performance when Subcontractors are used. Whenever or wherever a Subcontractor is used by the Vendor, the Subcontractor must abide by all terms and conditions of the Vendor Contract. If a Subcontractor is to be used for any part of the Contract, the Vendor must clearly explain their participation as part of the proposal.

7.12 Disposal requirements

The Vendor will be responsible for removal and proper disposal of the existing video wall, video wall management system, and all building materials removed, damaged, and/or discarded during construction and installation of the System. This will include disposal of the eight existing 67” rear projection cubes that comprise the existing video wall. The Vendor will also be responsible for removal of all shipping materials used to transport the new Video Wall, Video Wall Management System, and any building materials. Upon completion of installation of the new Video Wall, the contractor will be required to properly clean the entire construction area. Any existing equipment damaged during System construction that is to remain must be repaired and/or replaced at no cost to the Department.

7.13 Ethics in Public Contracting

By submitting their proposals, Proposers certify that their proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other Proposer, supplier, manufacturer or subcontractor in connection with their proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any

payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

Attachment A

PROPOSER INFORMATION--Submit this completed form under Tab 1 of proposal; see section 2.4

1. PROPOSING COMPANY/ORGANIZATION NAME _____

   FEIN (Federal Employer ID Number) _____ OR SOCIAL SECURITY NUMBER (if sole proprietorship) _____

   Phone ( ) _____ Toll Free Phone ( ) _____

   FAX ( ) _____ Email Address _____

   Address _____

   City _____ State _____ Zip + 4 _____

2. Name the person to contact for questions concerning this proposal.

   Name _____ Title _____

   Phone ( ) _____ Toll Free Phone ( ) _____

   FAX ( ) _____ Email Address _____

   Address _____

   City _____ State _____ Zip + 4 _____

3. Any vendor awarded over $25,000 on this contract must submit affirmative action information to the department. Please name the Personnel/Human Resource and Development or other person responsible for affirmative action in the company to contact about this plan.

   Name _____ Title _____

   Phone ( ) _____ Toll Free Phone ( ) _____

   FAX ( ) _____ Email Address _____

   Address _____

   City _____ State _____ Zip + 4 _____

4. Mailing address to which state purchase orders are mailed and person the department may contact concerning orders and billings.

   Name _____ Title _____

   Phone ( ) _____ Toll Free Phone ( ) _____

   FAX ( ) _____ Email Address _____

   Address _____

   City _____ State _____ Zip + 4 _____

ATTACHMENT B
REFERENCES
(Submit this completed form under Tab 2 of proposal; see sections 2.4 for instructions)

PROPOSER: _____

Provide company name, address, contact person, telephone number, and appropriate information on the product(s) provided to customers similar to those requested in this solicitation document. Potential subcontractors cannot be references. Any subcontractor arrangement for the completion of this work shall be listed on a separate proposal page.

Company Name: _____
Address (include Zip + 4) _____
Contact Person _____ Phone No. _____
Email Address: _____
Product(s) Used and/or Service(s) Provided: _____

Company Name: _____
Address (include Zip + 4) _____
Contact Person _____ Phone No. _____
Email Address: _____
Product(s) Used and/or Service(s) Provided: _____

Company Name: _____
Address (include Zip + 4) _____
Contact Person _____ Phone No. _____
Email Address: _____
Product(s) Used and/or Service(s) Provided: _____

Company Name: _____
Address (include Zip + 4) _____
Contact Person _____ Phone No. _____
Email Address: _____
Product(s) Used and/or Service(s) Provided: _____

ATTACHMENT C
WisDOT MINORITY BUSINESS ENTERPRISE (MBE) PROGRAM
DISABLED VETERAN-OWNED BUSINESS (DVB) PROGRAM
AWARENESS, COMPLIANCE & ACTION PLAN

As a matter of sound business practice, the Wisconsin Department of Transportation is committed to "supply diversity" by promoting the use of minority business and disabled veteran-owned business whenever and wherever possible. Additionally, as an agency of the State of Wisconsin, WisDOT shares in the state goal of placing five (5) percent of its total annual purchasing dollars with state-certified minority and disabled veteran-owned businesses.

State of Wisconsin procurement policy provides that Minority Business Enterprises (MBE) and Disabled Veteran-owned Businesses (DVB) certified by the Wisconsin Department of Administration should have the maximum opportunity to participate in the performance of its contracts/projects.

You, as a contractor, are strongly urged to use due diligence to further this policy by awarding subcontracts to MBEs and DVBs by using such enterprises to provide goods and services incidental to this agreement (second-tier suppliers), with a goal of awarding 5% of the contract cost to such enterprises.

Authority for these programs is found in Wisconsin Statutes 15.107(2), 16.283(3), 16.75(3m), 16.755 and 560.036(2), and details about the program can be found at: https://wisdp.wi.gov/.

A complete listing of certified minority businesses, as well as the services and commodities they provide, is available on the web at: https://wisdp.wi.gov/Search.aspx

Monthly reports are requested to be submitted to the Department of Transportation Purchasing Unit, itemizing the costs of services and goods provided by certified firms. Reports should state the costs for the previous contract/project month.

Your complete response on the following form must address the following components of your company's/organization's commitment/action plan:

a) Indication that you understand the **WisDOT's goal,**
b) Listing of any **MBE/DVB vendors with which you intend to subcontract,**
c) Description of the various **second tier MBE/DVB expenses** (goods and services procured that are incidental to the contract/project; *examples are*: specific office supplies to perform the contract, percentage of cost for uniforms for contract staff, travel to perform the contract/project, percentage of facility maintenance services for your facility used directly by your staff during the contract/project period) your company/organization will be able to report that are in direct connection with the administration of this contract,
d) **Statement expressing your commitment** to complete the required monthly reports that will reflect your subcontracts and second-tier expenditures for the period.

For information on WISDOT's MBE Program, please email: DOTTIPSCOrrespond@dot.wi.gov or visit the website at: www.dot.wisconsin.gov/business/mbe

ATTACHMENT C

WisDOT MINORITY BUSINESS ENTERPRISE (MBE) PROGRAM
DISABLED VETERAN-OWNED BUSINESS (DVB) PROGRAM
AWARENESS, COMPLIANCE & ACTION PLAN

Complete, sign, and include in your bid response.

Failure to complete this form as a component of your bid may result in rejection of your bid.

Our company/organization is a Wisconsin-certified Minority Business Enterprise (MBE) ☐ Yes ☐ No

Our company/organization is a Wisconsin-certified Disabled Veteran-owned Business (DVB) ☐ Yes ☐ No

Our company/organization is a minority business but has not yet received Wisconsin certification (please provide details): _____ ☐ Yes ☐ No

Our company/organization is a disabled veteran-owned business but has not yet received Wisconsin certification (please provide details): _____ ☐ Yes ☐ No

We are aware of the WisDOT's goal to spend at least 5% of their total annual purchasing dollars with state-certified MBE /DVB firms. ☐ Yes ☐ No

We are aware that if awarded this contract/project our company/organization will provide monthly or quarterly reports to WisDOT reporting all expenditure activity directed to MBE/DVB subcontractors or second-tier MBE/DVB suppliers that directly relate to this contract. (Any non-certified minority or non-certified disabled veteran-owned businesses could be a potential subcontractor/second-tier supplier--indicate these on your plan. WisDOT will work with those businesses for possible certification.) ☐ Yes ☐ No

Subcontractors: Our company/organization intends to subcontract at least 5% dollar volume with certified MBE/DVB firms listed below (names, addresses, telephone numbers): ☐ Yes ☐ No

_____

_____

Second-tier Suppliers: In addition to direct subcontracting efforts, your company/organization can help WisDOT achieve the 5% goal by managing your second-tier MBE/DVB purchases. Second-tier business refers to incidental business expenses your company may spend with Wisconsin-certified MBE/DVB firms as it pursues the normal course of business supplying the WisDOT-contracted products or services. Here are some *examples*:

- Percentage of your office supplies specifically used during the course of this contract/project.
- Percentage of uniform costs for staff performing this contract/project.
- If you travel to perform this contract/project, you could use a state-certified MBE travel agency and report that expense.
- Percentage of facilities maintenance services for facility(ies) directly used by your staff during the course of this contract/project.

These second-tier expenses can only be reported to the extent that they directly relate to your business with WisDOT. The percentage of the expense you can report is determined by the amount of your WisDOT sales as it relates to your total sales volume. Per the terms of your contract, you should actively pursue directing business towards these types of companies, and report your efforts in this regard on a monthly basis.

****

In paragraph form, describe your company/organization's commitment/action plan with regard to the planned use of state-certified MBE/DVB businesses in subcontracting efforts, as well as developing MBE/DVB second-tier suppliers. Please list your specific commitments (attach sheet, if necessary).

_____

_____

_____

SIGNATURE: _____ DATE: _____

PRINTED NAME & TITLE: _____

COMPANY: _____ PHONE NUMBER: _____

ATTACHMENT D
COST PROPOSAL

Submit one original and one copy of this completed form under Tab 3 of proposal; refer to Section 2.4 and Section 6.1 of the RFP for additional instructions. Vendor proposals and pricing may not be contingent on the number of Vendors awarded a contract; Vendor proposals and/or pricing contingent on the number of contracts awarded from this RFP may be rejected. Please Note: The Vendor is to provide all of the necessary hardware and software licenses required for the Video Wall and Video Wall Management System. The cost of all hardware or software, including all licenses, should be included in the cost sheet. All licensing fees/costs should be one-time costs and should be good for the life of the System.

Bid Sheet

Bid Item #		Bid Item	Bid Item Description	Bid Item Cost	Unit	Quantity	Total Cost for Bid Item
1		Video Wall* (Refer to Attachment G)	Cost for complete Video Wall including all equipment, cables, incidentals necessary for installation, and warranty. Price quoted must be FOB Destination, freight included to the WisDOT STOC.		Lump Sum	1	
1	Include either Flat Panel Display Units or Rear Projection Cubes	Flat Panel Display Unit for Video Wall** (Refer to Attachment G)	Cost for complete Flat Panel Display Unit for the Video Wall including all equipment, cables, incidentals necessary for installation, and warranty. Price quoted must be FOB Destination, freight included to the WisDOT STOC.		Each	16	
		Rear Projection Cube for Video Wall (Refer to Attachment G)	Cost for complete Rear Projection Cube for the Video Wall including all equipment, cables, incidentals necessary for installation, and warranty. Price quoted must be FOB Destination, freight included to the WisDOT STOC.		Each	12	
2		Flat Panel Display Unit for Standalone Display*** (Refer to Attachment H)	Cost for complete Flat Panel Display Unit for Standalone Display including all equipment, cables, incidentals necessary for installation, and warranty. Price quoted must be FOB Destination, freight included to the WisDOT STOC.		Each	2	
3		Flat Panel Display Unit for Workstation*** (Refer to Attachment I)	Cost for complete Flat Panel Display Unit for Workstation including all equipment, cables, incidentals necessary for installation, and warranty. Price quoted must be FOB Destination, freight included to the WisDOT STOC.		Each	12	
4		Video Wall Management System* (Refer to Attachment J)	Cost for complete Video Wall Management System including all equipment, cables, incidentals necessary for installation, and warranty. Price quoted must be FOB Destination, freight included to the WisDOT STOC.		Lump Sum	1	

5	Control Room Audio System* (Refer to Attachment K)	Cost for complete Control Room Audio System, including all equipment, cables, incidentals necessary for installation, and warranty. Price quoted must be FOB Destination, freight included to the WisDOT STOC.		Lump Sum	1	
6	Year 2 of Annual Service and Support Agreement (Refer to Attachment L)	Cost for second year of service, support, and maintenance for the System.		Year	1	
7	Year 3 of Annual Service and Support Agreement (Refer to Attachment L)	Cost for third year of service, support, and maintenance for the System.		Year	1	
8	Year 4 of Annual Service and Support Agreement (Refer to Attachment L)	Cost for fourth year of service, support, and maintenance for the System.		Year	1	
9	Year 5 of Annual Service and Support Agreement (Refer to Attachment L)	Cost for fifth year of service, support, and maintenance for the System.		Year	1	
10	Year 6 of Annual Service and Support Agreement (Refer to Attachment L)	Cost for sixth year of service, support, and maintenance for the System.		Year	1	
11	Year 7 of Annual Service and Support Agreement (Refer to Attachment L)	Cost for seventh year of service, support, and maintenance for the System.		Year	1	
12	Year 8 of Annual Service and Support Agreement (Refer to Attachment L)	Cost for eighth year of service, support, and maintenance for the System.		Year	1	
					System Total:	

Notes:

* Provide an itemized cost for this Bid Item (See Itemized Bid Table included as part of this attachment).
** All vendors providing a Video Wall comprised of Flat Panel Display Units must provide four additional units which will be used as spares.
*** Quantity shown for proposal cost scoring purposes only. Actual quantities procured may vary and may be higher or lower than those shown.

Bid Item 1 - Itemized Bid Sheet

Item	Bid Item #	Description of Item	Cost	Unit	Quantity	Total Cost
Video Wall (Refer to Attachment J)	1					

Bid Item 4 - Itemized Bid Sheet

Item	Bid Item #	Description of Item	Cost	Unit	Quantity	Total Cost
Video Wall Management System (Refer to Attachment L)	4					

Item	Bid Item #	Description of Item	Cost	Unit	Quantity	Total Cost
Video Wall Management System (Refer to Attachment K)	5					
					Bid Item 5 Total:	

ATTACHMENT E
EXISTING STOC CONTROL ROOM
AND VIDEO WALL LAYOUT

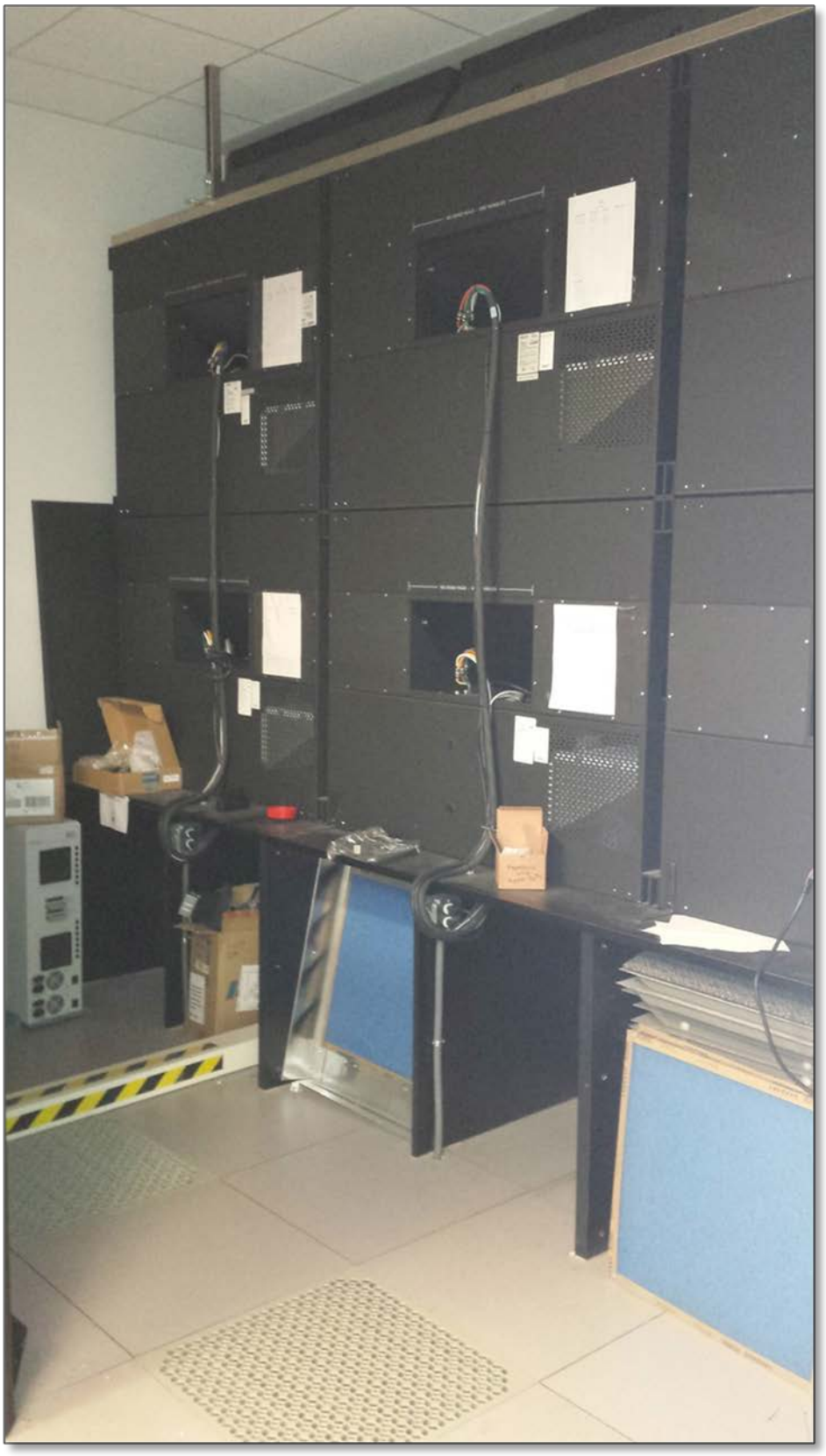
EXISTING STOC VIDEO WALL – 67” REAR PROJECTION CUBES

EXISTING STOC CONTROL ROOM – LOOKING SOUTH

EXISTING STOC CONTROL ROOM – LOOKING NORTH

TWO 26” X 26” VENTS BELOW EXISTING VIDEO WALL

EXISTING VIDEO WALL MANAGEMENT SYSTEM

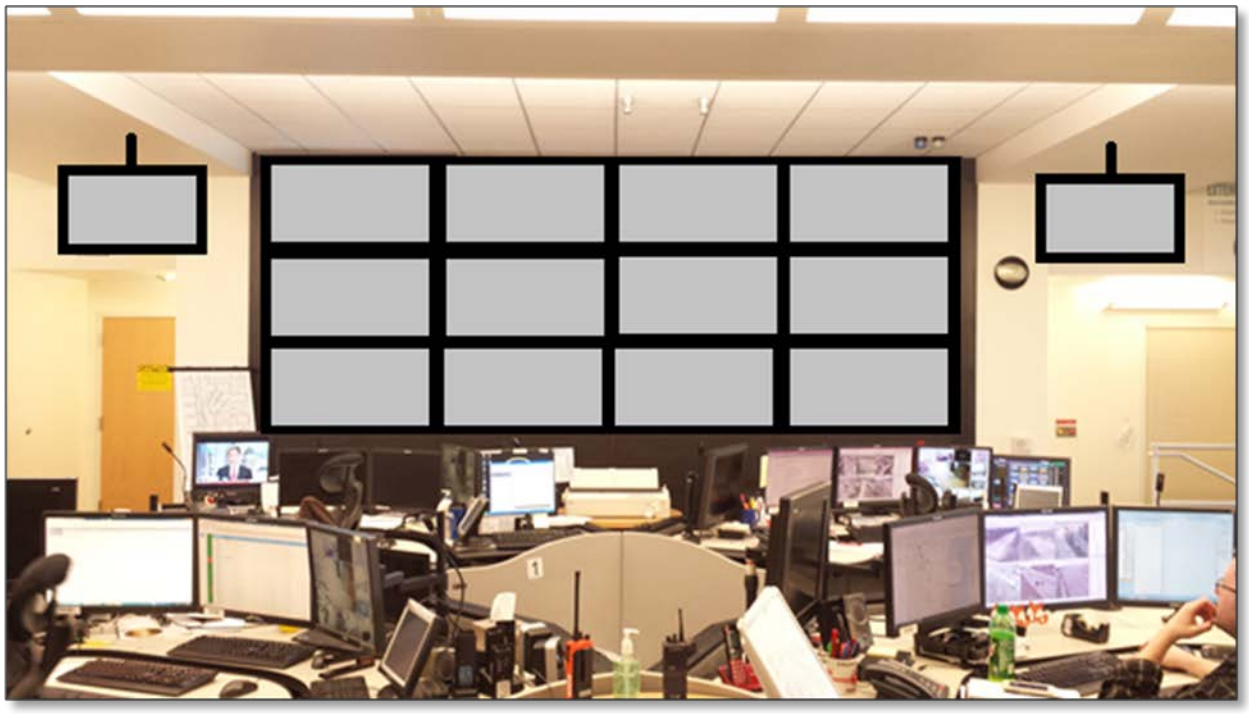


AREA BEHIND EXISTING VIDEO WALL

EXISTING 24” X 24” AIR FILTERS

EXISTING JUPITER VIDEO WALL PROCESSOR

ATTACHMENT F
PROPOSED VIDEO WALL LAYOUT



PROPOSED VIDEO WALL INCLUDING (2) STANDALONE FLAT PANEL DISPLAY UNITS

ATTACHMENT G
CONTROL ROOM VIDEO WALL

1) Control Room Video Wall

A. Description.

This special provision describes furnishing a fully integrated, commercial grade, high definition Control Room Video Wall (Video Wall) for the WisDOT Statewide Traffic Operations Center (STOC). The Video Wall will be comprised of an array of either Flat Panel Display Units or Rear Projection Cubes. The specifications described in section one are common to either solution. The Video Wall will be managed by a Video Wall Management System procured as part of this contract.

B. Materials.

Furnish a Video Wall that meets or exceeds the following requirements:

Composition

Furnish a Video Wall that is comprised of either Flat Panel Display Units or Rear Projection Cubes. Each Flat Panel Display Unit or Rear Projection Cube must have a minimum viewable area (diagonal) of 55 inches and a maximum viewable area (diagonal) of 60 inches. The Video Wall must be either all Flat Panel Display Units or all Rear Projection Cubes; the Video Wall may not include a mix of Flat Panel Display Units and Rear Projection Cubes. The Flat Panel Display Units/Rear Projection Cubes that comprise the Video Wall must all be identical in size (viewing area).

Display Matrix/Array

Furnish a Video Wall that is four Flat Panel Display Units/Rear Projection Cubes wide by three Flat Panel Display Units/Rear Projection Cubes tall. Furnish a Video Wall that is capable of displaying one large image across the entire Video Wall.

Dimensions

Furnish a Video Wall that meets the following dimensional requirements:

- Minimum Height: 80 inches
- Maximum Height: 91 inches
- Minimum Width: 192 inches
- Maximum Width: 217 inches

Display Spacing

Furnish a Video Wall with a maximum image to image gap of:

- Flat Panel Display Units: 0.25 inches (6.5 mm)
- Rear Projection Cubes: 0.1 inches (2.5 mm)

Connectivity

Furnish a Display Wall that has all the necessary input and output terminals required to connect the Video Wall to the Video Wall Management System. All input and output terminals must be fully integrated into the Video Wall; no connection conversion devices will be permitted. All cables used to connect the Video Wall to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. Vendors that provide a Video Wall solution that requires connecting each Flat Panel

Display Unit or Rear Projection Cube to one another must provide all of the necessary input and output terminals to properly connect them and the cables must utilize a digital signal.

Power Requirements

Furnish a Video Wall that is capable of running on 100 volt to 220 volts Alternating Current (AC), 50 to 60 Hertz. All electronic components of the video wall should include surge protection/suppression to protect them from a spike in voltage. The Vendor should provide any available information related to energy consumption of the Video Wall being proposed under all display modes (economy, normal, bright, etc.).

Amplifiers

The Vendor must provide all necessary video signal amplifiers required for the Video Wall and Video Wall Management System.

Display Management

Furnish a Video Wall that is capable of being managed by the Video Wall Management System procured under this contract. It is preferred, but not required, that the Video Wall Management System be capable of automatically or manually adjusting the settings (color contrast, brightness, and/or image location/ alignment) of each Flat Panel Display Unit or Rear Projection Cube comprising the Video Wall such that each Flat Panel Display Unit or Rear Projection Cube matches the visual appearance and picture alignment of the others in the Display Wall. The Video Wall must be capable of being managed by software that can be installed or accessed from any computer in the STOC control room.

Error Detection and Alert

It is preferable, but not mandatory, that the Video Wall that is capable of providing error or failure information to the Video Wall Management System procured under this contract.

Runtime

Furnish a Video Wall capable of running 24 hours per day, seven days a week, and 365 days per year.

Burn-In

Furnish a Video Wall that is not susceptible to image burn-in or image retention. Any Flat Panel Display Units or Rear Projection Cubes that experience any level of burn-in or image retention during the warranty period will be replaced by the Vendor at no cost to the Department.

Cabling

Furnish all necessary cabling required for normal Video Wall operations. Cabling will include all power cables and video cables required to connect the Video Wall to the Video Wall Management System. All cables used to connect the Video Wall to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

Service and Support

Provide customer service and support for the Video Wall during normal business hours, Monday through Friday, with an email and phone contact provided for the duration of the warranty period and/or service and support contract. For each year in which the Department has a service and support agreement with the Vendor, the Vendor will be required to be onsite to diagnose any System problems, hardware failures, or software issues within 48 hours of notification by WisDOT. Immediately after identification or diagnosis of the problem, the Vendor will be required to provide the Department with a quote to repair or replace any items not currently under warranty and the timeframe to complete any repairs.

C. Construction Methods.

Deliver the Video Wall to the Department, or Department representative designated on individual purchase orders. Provide a representative during construction, installation, and configuration of the Video Wall to provide support and answer any questions.

Building Permits

The Vendor will be responsible for obtaining all necessary building permits required for construction and installation of the Video Wall. The Vendor will also be responsible for the cost of any permit fees that are required to obtain the necessary construction permits. The Vendor will need to obtain approval from the building management company, CB Richard Ellis, to begin any construction.

Building Construction

The selected Vendor will be required to provide all drawings, materials, and labor required to construct and install the Video Wall. Provide all brackets, mounts, or other hardware required to securely install the Video Wall. Furnish parts that consist entirely of corrosion-resistant materials. Any building structure modified and/or damaged during construction and installation of the video wall must be repaired and/or replaced at no cost to the Department. All new walls must be painted to match the color of the walls in the STOC control room. Upon completion of installation of the new Video Wall, the contractor will be required to properly clean the entire construction area.

Construction Schedule

The selected Vendor will be required to provide a detailed schedule for all construction, disposal and installation activities. WisDOT approval of the proposed schedule will be required prior to beginning any construction. The Vendor is encouraged to complete all construction and installation activities as quickly as possible to minimize overall disruption of control room operations.

Airflow Vents

The existing air circulation patterns in the STOC control room require ventilation between the control room and the space behind the Video Wall. A series of air vents with replaceable air filters are located below the existing Video Wall; the new Video Wall will need to include similar facilities to facilitate air circulation in the STOC control room.

Disposal of Existing Video Wall

The Vendor will be responsible for the removal and proper disposal of the existing video wall and all building materials removed and or discarded during construction and installation of the new Video Wall. This will include disposal of the eight existing 67” rear projection cubes that comprise the existing video wall. The Vendor will also be responsible for removal of all shipping materials used to transport the new Video Wall, Video Wall Management System, and any required building materials.

D. Acceptance Testing.

The Vendor and the Department will work together to make any necessary revisions and/or modifications to the Acceptance Test Procedure (ATP) submitted by the Vendor that will be used to demonstrate all required functionality. If, during the course of testing, Department staff determine that the Video Wall or any associated hardware performs unfavorably or fails any part of the acceptance test; these problems will be corrected at no additional expense to the Department. The Vendor will be required to correct all deficiencies observed during the ATP within 21 calendar days of notification to the Vendor of the deficiency by the Department. The Vendor will restart the ATP once all problems have been corrected. If

the Vendor is unable to demonstrate any of the device functionality or requirements identified in this specification or the ATP, the Department reserves the right to reject the Vendor's proposal.

E. Method of Measurement.

A complete Video Wall shall be measured as a unit delivered, deployed, tested, and accepted for valid operation.

F. Basis of Payment.

A complete Video Wall, measured as provided above, shall be paid for at the contract price for the Video Wall, which price shall be payment in full for completing delivery and any installation of the Video Wall; and for all labor, tools, ground transportation, equipment, cables, connections, and incidentals necessary to complete delivery.

2) Flat Panel Display Unit for Video Wall

A. Description.

This special provision describes furnishing a commercial grade, high definition (1920 x 1080 pixel) Flat Panel Display Unit that will be installed in conjunction with other Flat Panel Display Units in a matrix or array type format to build a Video Wall in the WisDOT STOC control room. The Video Wall will be managed by the Video Wall Management System procured as part of this contract.

B. Materials.

Furnish a Flat Panel Display Unit that meets or exceeds the following requirements:

Viewable Area

Furnish a Flat Panel Display Unit with a native aspect ratio of 16:9. The size, or viewable area, of the Flat Panel Display Unit must be a minimum of 54.5 inches (measured diagonally) and a maximum of 60.5 inches (measured diagonally). The Flat Panel Display Units, when combined to form the video wall, must meet the minimum and maximum dimension requirements identified for the Video Wall provided as part of this contract. All Flat Panel Display Units procured under this contract must be identical in size; standalone Flat Panel Display Units that are not part of the Video Wall do not need to meet this requirement.

Video Wall Matrix

Furnish a Flat Panel Display Unit that is capable of being combined with other Flat Panel Display Units to form a Video Wall that is four Flat Panel Display Units wide by three Flat Panel Display Units tall. Furnish a Flat Panel Display Unit that, when combined with other Flat Panel Display Units, is capable of displaying one large image across the entire Video Wall.

Video Display

Furnish a Flat Panel Display Unit that is capable of displaying High-Definition (HD) video. Furnish a Flat Panel Display Unit Display that meets the following requirements:

- Native Display Resolution: 1920 x 1080 pixels
- Aspect Ratio: 16:9
- Minimum Refresh Rate: 60 Hertz
- Backlight Type: LED Edge Lit or LED Direct Lit
- Minimum Brightness (Typical): 500 candelas per square meter
- Minimum Contrast Ratio (Typical): 1300:1
- Surface Treatment: Anti-glare preferred but not required
- Minimum Viewing Angle: 178 degrees (horizontal and vertical)

Bezel

Furnish a Flat Panel Display Unit with an ultra-thin bezel, or border, around the display. The bezel on each side of the display (top, bottom, left, and right) should be a maximum of 0.14 inches (3.5 mm). The total vertical bezel (top plus bottom bezel) and horizontal bezel (left plus right bezel) should be a maximum of 0.225 inches (5.7 mm). Flat Panel Display Units with smaller bezels are preferred; Flat Panel Display Units that are larger than the maximum requirements will not be allowed.

Connectivity

Furnish a Flat Panel Display Unit that comes with all the necessary input and output terminals required to fully operate the Flat Panel Display Unit and Video Wall. All input and output terminals should be fully integrated into the Flat Panel Display Unit; no connection conversion devices will be permitted. All cables used to connect the Flat Panel Display Unit to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. Vendors that provide a Video Wall solution that requires connecting each Flat Panel Display Unit to one another must provide all necessary input and output terminals to properly connect each Flat Panel Display Unit. At a minimum, furnish a Flat Panel Display Unit that has the following terminals:

- Input Terminals:
  - Digital: DisplayPort or HDMI or DVI-D
  - Analog: VGA (15 Port) or Component or Composite
- Output Terminals:
  - Digital: DisplayPort or HDMI or DVI-D
- External Control: RS-232 or LAN 10/100 BaseT Ethernet, IR Remote

Power Requirements

Furnish a Flat Panel Display Unit that is capable of running on 100 volt to 220 volts Alternating Current (AC), 50 to 60 Hertz power. The Flat Panel Display should include surge protection/suppression to protect it from a spike in voltage. The Vendor should provide any available information related to energy consumption of the Flat Panel Display Units being proposed in all display modes (economy, normal, bright, etc.).

Environmental Operating Conditions

Furnish a Flat Panel Display Unit that is capable of operating in temperatures ranging from 50 degrees Fahrenheit to 86 degrees Fahrenheit (10 degrees Celsius to 30 degrees Celsius). Furnish a Flat Panel Display Unit that is capable of operating under a relative humidity ranging between 20 percent and 80 percent.

Display Management

Furnish a Flat Panel Display Unit that is capable of being managed by the Video Wall Management System procured under this contract. It is preferred, but not required, that the Video Wall Management System be capable of automatically or manually adjusting the settings (color, contrast, brightness, and/or image location/alignment) of each Flat Panel Display Unit comprising the Video Wall such that each Flat Panel Display Unit matches the visual appearance and picture alignment of the others in the Display Wall.

Error Detection and Alert

It is preferable, but not required, that the Flat Panel Display Units be capable of providing error or failure information to the Video Wall Management System procured under this contract.

Runtime
Furnish only Flat Panel Display Units that are capable of running 24 hours per day, 7 days a week, and 365 days per year.

Burn-In
Furnish only Flat Panel Display Units that are not susceptible to image burn-in or image retention. Any Flat Panel Display Units that experiences any level of burn-in during the warranty period must be replaced by the Vendor at no cost to the Department.

Cabling
Furnish all necessary cabling required for normal operations. Cabling will include all power and video cables required to connect the Flat Panel Display Unit to the Video Wall Management System. All cables used to connect the Flat Panel Display Unit to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

Reliability
Furnish a Flat Panel Display Unit with a minimum Mean Time before Failure (MTBF) of 60,000 hours. This requirement will apply to all Flat Panel Display Unit components. Provide any available MTBF calculations as part of the proposal.

User Manual
Furnish four hard copies and four PDF copies on CD of the User's Manual for the Flat Panel Display Units. The User's Manual should include comprehensive instructions to setup, operations, and troubleshooting the Flat Panel Display Units.

Warranty
Furnish a Flat Panel Display Unit with a minimum warranty of two years from the date of approval of the Acceptance Test Procedure by the Department. During the warranty period, repair and/or replace, at no cost to the Department, any and all Flat Panel Display Units that fail to operate as specified within 10 business days of notification by the Department of the failure.

Service and Support
Provide customer service and support for the Flat Panel Display Unit during normal business hours, Monday through Friday, with an email and phone contact provided for the duration of the warranty period and/or service and support contract.

C. Construction Methods.
Deliver the Flat Panel Display Unit to the Department, or Department representative designated on individual purchase orders. Provide a representative during installation and configuration of the Flat Panel Display Unit to provide support and answer any questions.

Unit Mounting
Provide all brackets, mounts, or other hardware required to securely mount the Flat Panel Display Units to the wall constructed as part of this contract. Furnish parts that consist entirely of corrosion-resistant materials.

D. Acceptance Testing.

The Vendor and the Department will work together to make any necessary revisions and/or modifications to the Acceptance Test Procedure (ATP) submitted by the Vendor that will be used to demonstrate all required functionality. If, during the course of testing, Department staff determine that the Device, any associated hardware, or any other part of the System performs unfavorably or fails any part of the acceptance test; these problems will be corrected at no additional expense to the Department. The Vendor will be required to correct all deficiencies observed during the ATP within 21 calendar days of notification to the Vendor of the deficiency by the Department. Restart ATP once all problems have been corrected. If the Vendor is unable to demonstrate any of the device functionality or requirements identified in this specification or the ATP, the Department reserves the right to reject the Vendor's proposal.

E. Method of Measurement.

A complete Flat Panel Display Unit shall be measured as a unit delivered, deployed, tested, and accepted for valid operation.

F. Basis of Payment.

A complete Flat Panel Display Unit, measured as provided above, shall be paid for at the contract price for each Flat Panel Display Unit, which price shall be payment in full for completing delivery and any installation; and for all labor, tools, ground transportation, equipment, cables, connections, and incidentals necessary to complete delivery.

3) Rear Projection Cube for Video Wall

A. Description.

This special provision describes furnishing a commercial grade, high definition (1920 x 1080 pixel) Rear Projection Cube that will be installed in conjunction with other Rear Projection Cubes in a matrix or array type format to build a Video Wall in the WisDOT STOC control room. The Video Wall will be managed by a Video Wall Management System procured as part of this contract.

B. Materials.

Furnish a Rear Projection Cube that meets or exceeds the following requirements:

Viewable Area

Furnish a Rear Projection Cube with a native aspect ratio of 16:9. The size, or viewable area, of the Rear Projection Cube must be a minimum of 54.5 inches (diagonal) and a maximum of 60.5 inches (diagonal). The Rear Projection Cubes, when combined to form the Video Wall, must meet the minimum and maximum dimension requirements identified for the Video Wall provided as part of this contract. All Rear Projection Cubes provided as part of this contract must be identical in size.

Video Wall Matrix

Furnish a Rear Projection Cube that is capable of being combined with other Rear Projection Cubes to form a Video Wall that is four Rear Projection Cubes wide by three Rear Projection Cubes high. Furnish a Rear Projection Cube that, when combined with other Rear Projection Cubes to form the Video Wall, is capable of displaying one large image across the entire Video Wall.

Image to Image Gap

Furnish a Rear Projection Cube that is capable of being placed adjacent to another Rear Projection Cube such that the maximum horizontal and vertical image to image gap is a maximum of 0.1 inches (2.5 mm).

Rear Projection Cubes with a smaller image to image gap are preferred; Rear Projection Cubes that have an image to image gap that is larger than the maximum requirements will not be allowed.

Video Display

Furnish a Rear Projection Cube that is capable of displaying High-Definition (HD) video. Furnish a Rear Projection Cube that meets the following requirements:

- Native Display Resolution: 1920 x 1080 pixels
- Aspect Ratio: 16:9
- Display Type: Rear Projection
- Display Technology: DLP
- Minimum Brightness (Normal Mode): 300 candelas per square meter
- Minimum Brightness Uniformity: 95 percent
- Minimum Contrast Ratio (Typical): 1300:1
- Surface Treatment: Anti-Glare preferred but not required
- Minimum Viewing Angle:
  - Horizontal: 178 degrees
  - Vertical: 120 degrees
- View-ability at ½ Gain:
  - Horizontal: +/- 35 degrees
  - Vertical: +/- 30 degrees

Connectivity

Furnish a Rear Projection Cube should that comes with all the necessary input and output terminals necessary to fully operate the Rear Projection Cube and Video Wall. All input and output terminals should be fully integrated into the Rear Projection Cube; no connection conversion devices will be permitted. All cables used to connect the Rear Projection Cubes to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. Vendors that provide a Video Wall solution that requires connecting each Rear Projection Cube to one another must provide all of the necessary input and output terminals to properly connect each Rear Projection Cube. At a minimum, furnish a Rear Projection Cube that has the following terminals:

- Input Terminals:
  - Digital: DVI-D or HDMI or DisplayPort
  - Analog: VGA (9 or 15 Port)
- Output Terminals:
  - Digital: DisplayPort or HDMI or DVI-D
- External Control: LAN 10/100 BaseT Ethernet and IR Remote

Power Requirements

Furnish n Rear Projection Cube that is capable of running on 100 volts to 240 volts Alternating Current (AC), 50 to 60 Hertz. The Rear Projection Cube should include surge protection/suppression to protect it from a spike in voltage. The Vendor should provide any available information related to energy consumption of the Rear Projection Cube being proposed in all display modes (economy, normal, bright, etc.).

Redundancy

Provide a Rear Projection Cube with redundant features. Furnish a Rear Projection Cube with a redundant LED light source. Rear Projection Cubes with redundant power supplies and cooling fans/units are preferred but not required.

Environmental Operating Conditions
Furnish a Rear Projection Cube that is capable of operating in temperatures ranging from 50 degrees Fahrenheit to 86 degrees Fahrenheit (10 degrees Celsius to 30 degrees Celsius). Furnish a Rear Projection Cube that is capable of operating under a relative humidity ranging between 20 percent and 80 percent.

Display Management
Furnish a Rear Projection Cube that is capable of being managed by the Video Wall Management System procured under this contract. It is preferred, but not required, that the Video Wall Management System be capable of automatically or manually adjusting the settings (color, contrast, brightness, and/or image location/alignment) of each Rear Projection Cube comprising the Video Wall such that each Rear Projection Cube matches the visual appearance and picture alignment of the others in the Display Wall.

Error Detection and Alert
It is preferred, but not required, that the Rear Projection Cubes be capable of providing error or failure information to the Video Wall Management System procured under this contract.

Runtime
Furnish only Rear Projection Cubes that are capable of running 24 hours per day, 7 days a week, and 365 days per year.

Burn-In
Furnish only Rear Projection Cubes that are not susceptible to image burn-in or image retention. Any Rear Projection Cubes that experiences any level of burn-in during the warranty period must be replaced by the Vendor at no cost to the Department.

Service Access
Furnish a Rear Projection Cube with service access from the rear of the cube. Front access Rear Projection Cubes will not be allowed.

Cabling
Furnish all necessary cabling required for normal Rear Projection Cube operations. Cabling will include all power cables, video cables, and any audio cables required to connect the Rear Projection Cube to the Video Wall Management System. All cables used to connect the Rear Projection Cubes to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

Reliability
Furnish a Rear Projection Cube with a minimum Mean Time Before Failure (MTBF) of 60,000 hours. This requirement will apply to all Rear Projection Cube components. Provide any available MTBF calculations as part of the proposal.

User Manual
Furnish four hard copies and four PDF copies on CD of the User's Manual for the Rear Projection Cubes. The User's Manual should include comprehensive instructions to setup, operations, and troubleshooting the Rear Projection Cube.

Warranty
Furnish a Rear Projection Cube with a minimum warranty of two years from the date of approval of the Acceptance Test Procedure by the Department. During the warranty period, repair and/or replace, at no cost to the Department, any and all Rear Projection Cubes that fail to operate as specified within 10 business days of notification by the Department of the failure.

Service and Support
Provide customer service and support for the Rear Projection Cubes during normal business hours, Monday through Friday, with an email and phone contact provided for the duration of the warranty period and/or service and support contract.

C. Construction Methods.
Deliver the Rear Projection Cube to the Department, or Department representative designated on individual purchase orders. Provide a representative during installation and configuration of the Rear Projection Cube, Video Wall, and Video Wall Management System to provide support and answer any questions.

Unit Mounting
Provide all supports, brackets, mounts, or other hardware required to securely mount the Rear Projection Cube. Furnish parts that consist entirely of corrosion-resistant materials.

D. Acceptance Testing.
The Vendor and the Department will work together to make any necessary revisions and/or modifications to the Acceptance Test Procedure (ATP) submitted by the Vendor that will be used to demonstrate all required functionality. If, during the course of testing, Department staff determine that the Device, any associated hardware, or any other part of the System performs unfavorably or fails any part of the acceptance test; these problems will be corrected at no additional expense to the Department. The Vendor will be required to correct all deficiencies observed during the ATP within 21 calendar days of notification to the Vendor of the deficiency by the Department. Restart ATP once all problems have been corrected. If the Vendor is unable to demonstrate any of the device functionality or requirements identified in this specification or the ATP, the Department reserves the right to reject the Vendor's proposal.

E. Method of Measurement.
A complete Rear Projection Cube shall be measured as a unit delivered, deployed, tested, and accepted for valid operation.

F. Basis of Payment.
A complete Rear Projection Cube, measured as provided above, shall be paid for at the contract price for each Flat Panel Display Unit, which price shall be payment in full for completing delivery and any installation; and for all labor, tools, ground transportation, equipment, cables, connections, and incidentals necessary to complete delivery.

ATTACHMENT H
FLAT PANEL DISPLAY UNIT FOR STANDALONE DISPLAY

A. Description.

This special provision describes furnishing a commercial grade, high definition (1920 x 1080 pixel) Flat Panel Display Unit. The Flat Panel Display Unit will be used as a standalone display that will not be integrated with the Flat Panel Display Units that comprise the Video Wall. The Flat Panel Display Unit will be managed by the Video Wall Management System procured as part of this contract.

B. Materials.

Furnish a Flat Panel Display Unit that meets or exceeds the following requirements:

Viewable Area

Furnish a Flat Panel Display Unit with a minimum size, or diagonal viewable area, of 54.5 inches.

Depth

Furnish a Flat Panel Display Unit with a maximum depth, excluding any mounting hardware, of 2.5 inches.

Weight

Furnish a Flat Panel Display Unit with a maximum weight, excluding any mounting hardware, of 65 pounds.

Bezel

Furnish a Flat Panel Display Unit with a bezel, or border, around all four sides of the LED display (top, bottom, left, and right) of no more than 1.0 inches.

Video Display

Furnish a Flat Panel Display Unit that is capable of displaying High-Definition (HD) video. Furnish a Flat Panel Display Unit Display that meets the following requirements:

- Native Display Resolution: 1920 x 1080 pixels
- Aspect Ratio: 16:9
- Minimum Refresh Rate: 60 Hertz
- Minimum Viewing Angle: 178 degrees (horizontal and vertical)

Connectivity

Furnish a Flat Panel Display Unit that comes with all the necessary input and output terminals necessary to fully operate the Flat Panel Display Unit. All input and output terminals should be fully integrated into the Flat Panel Display Unit; no connection conversion devices will be permitted. All cables used to connect the Flat Panel Display Units to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. At a minimum, furnish a Flat Panel Display Unit that has the following terminals:

- Input Terminals:
  - Digital: (2) HDMI (required), (1) DisplayPort (preferred), (1) DVI-D ((preferred)
  - Analog: (1) VGA (15 Port) or (1) Component
- External Control: LAN 10/100 BaseT Ethernet and IR Remote

Power Requirements

Furnish a Flat Panel Display Unit that is capable of running on 100 volt to 220 volts Alternating Current (AC), 50 to 60 Hertz.

Amplifiers
The Vendor must provide all necessary video signal amplifiers required for the Flat Panel Display Unit.

Environmental Operating Conditions
Furnish a Flat Panel Display Unit that is capable of operating in temperatures ranging from 50 degrees Fahrenheit to 86 degrees Fahrenheit (10 degrees Celsius to 30 degrees Celsius). Furnish a Flat Panel Display Unit that is capable of operating under a relative humidity ranging between 20 percent and 80 percent.

Display Management
Furnish a Flat Panel Display Unit that is capable of displaying video from the Video Wall Management System procured under this contract.

Runtime
Furnish only Flat Panel Display Units that are capable of running 24 hours per day, 7 days a week, and 365 days per year.

Burn-In
Furnish only Flat Panel Display Units that are not susceptible to image burn-in or image retention. Any Flat Panel Display Units that experiences any level of burn-in during the warranty period must be replaced by the Vendor at no cost to the Department.

Cabling
Furnish all necessary cabling required for normal operations. Cabling will include all power cables, video cables, and any audio cables required to connect the Flat Panel Display Unit to the Video Wall Management System. All cables used to connect the Flat Panel Display Units to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

User Manual
Furnish four hard copies and four PDF copies on CD of the User's Manual for the Flat Panel Display Units. The User's Manual should include comprehensive instructions to setup, operations, and troubleshooting the Flat Panel Display Units.

Warranty
Furnish a Flat Panel Display Unit with a minimum warranty of two years from the date of approval of the Acceptance Test Procedure by the Department. During the warranty period, repair and/or replace, at no cost to the Department, any and all Flat Panel Display Units that fail to operate as specified within 10 business days of notification by the Department of the failure.

Service and Support
Provide customer service and support for the Flat Panel Display Unit during normal business hours, Monday through Friday, with an email and phone contact provided for the duration of the warranty period and/or service and support contract.

C. Construction Methods.

Deliver the Flat Panel Display Unit to the Department, or Department representative designated on individual purchase orders. Provide a representative during installation and configuration of the Flat Panel Display Unit and Video Wall Management System to provide support and answer any questions.

Unit Mounting

All Flat Panel Display Units will be mounted to the ceiling in the STOC control room. The Vendor will be required to mount the Flat Panel Display to the ceiling and repair any damage done during the installation. Provide all brackets, mounts, or other hardware required to securely mount the Flat Panel Display Units to the ceiling. Furnish parts that consist entirely of corrosion-resistant materials.

D. Acceptance Testing.

The Vendor and the Department will work together to make any necessary revisions and/or modifications to the Acceptance Test Procedure (ATP) submitted by the Vendor that will be used to demonstrate all required functionality. If, during the course of testing, Department staff determine that the Device, any associated hardware, or any other part of the System performs unfavorably or fails any part of the acceptance test; these problems will be corrected at no additional expense to the Department. The Vendor will be required to correct all deficiencies observed during the ATP within 21 calendar days of notification to the Vendor of the deficiency by the Department. Restart ATP once all problems have been corrected. If the Vendor is unable to demonstrate any of the device functionality or requirements identified in this specification or the ATP, the Department reserves the right to reject the Vendor's proposal.

E. Method of Measurement.

A complete Flat Panel Display Unit shall be measured as a unit delivered, deployed, tested, and accepted for valid operation.

F. Basis of Payment.

A complete Flat Panel Display Unit, measured as provided above, shall be paid for at the contract price for each Flat Panel Display Unit, which price shall be payment in full for completing delivery and any installation; and for all labor, tools, ground transportation, equipment, cables, connections, and incidentals necessary to complete delivery.

ATTACHMENT I
FLAT PANEL DISPLAY UNIT FOR WORKSTATION

A. Description.

This special provision describes furnishing a commercial grade, high definition (1920 x 1080 pixel) Flat Panel Display Unit. The Flat Panel Display Unit will be installed on a workstation in the STOC control room. The Flat Panel Display Unit will be managed by the Video Wall Management System procured as part of this contract.

B. Materials.

Furnish a Flat Panel Display Unit that meets or exceeds the following requirements:

Viewable Area

Furnish a Flat Panel Display Unit with a minimum size, or diagonal viewable area, of 21.5 inches.

Depth

Furnish a Flat Panel Display Unit with a maximum depth, excluding any mounting hardware, of 2.0 inches.

Weight

Furnish a Flat Panel Display Unit with a maximum weight, excluding any mounting hardware, of 12 pounds.

Bezel

Furnish a Flat Panel Display Unit with a bezel, or border, around all four sides of the display (top, bottom, left, and right) of no more than 0.6 inches.

Video Display

Furnish a Flat Panel Display Unit that is capable of displaying High-Definition (HD) video. Furnish a Flat Panel Display Unit Display that meets the following requirements:

- Native Display Resolution: 1920 x 1080 pixels
- Aspect Ratio: 16:9
- Minimum Refresh Rate: 60 Hertz
- Surface Treatment: Anti-glare preferred but not required

Connectivity

Furnish a Flat Panel Display Unit should that comes with all the necessary input and output terminals necessary to fully operate the Flat Panel Display Unit. All input and output terminals should be fully integrated into the Flat Panel Display Unit; no connection conversion devices will be permitted. All cables used to connect the Flat Panel Display Units to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. At a minimum, furnish a Flat Panel Display Unit that has the following terminals:

- Input Terminals:
  - Digital: (2) HDMI (required), (1) USB (preferred)
  - Analog: (1) VGA (15 Port) or (1) Component
- External Control: IR Remote

Power Requirements

Furnish a Flat Panel Display Unit that is capable of running on 100 volt to 220 volts Alternating Current (AC), 50 to 60 Hertz.

Amplifiers
The Vendor must provide all necessary video signal amplifiers required for the Flat Panel Display Unit.

Audio
Furnish a Flat Panel Display Unit that includes built in sound. The Flat Panel Display Unit should include a minimum of two 3-watt speakers.

Environmental Operating Conditions
Furnish a Flat Panel Display Unit that is capable of operating in temperatures ranging from 50 degrees Fahrenheit to 86 degrees Fahrenheit (10 degrees Celsius to 30 degrees Celsius). Furnish a Flat Panel Display Unit that is capable of operating under a relative humidity ranging between 20 percent and 80 percent.

Display Management
Furnish a Flat Panel Display Unit that is capable of displaying video from the Video Wall Management System procured under this contract.

Cabling
Furnish all necessary cabling required for normal operations. Cabling will include all power cables, video cables, and any audio cables required to connect the Flat Panel Display Unit to the Video Wall Management System. All cables used to connect the Flat Panel Display Units to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

User Manual
Furnish four hard copies and four PDF copies on CD of the User's Manual for the Flat Panel Display Units. The User's Manual should include comprehensive instructions to setup, operations, and troubleshooting the Flat Panel Display Units.

Warranty
Furnish a Flat Panel Display Unit with a minimum warranty of one year from the date of approval of the Acceptance Test Procedure by the Department. During the warranty period, repair and/or replace, at no cost to the Department, any and all Flat Panel Display Units that fail to operate as specified within 10 business days of notification by the Department of the failure.

Service and Support
Provide customer service and support for the Flat Panel Display Unit during normal business hours, Monday through Friday, with an email and phone contact provided for the duration of the warranty period and/or service and support contract.

C. Construction Methods.
Deliver the Flat Panel Display Unit to the Department, or Department representative designated on individual purchase orders. Provide a representative during installation and configuration of the Flat Panel Display Unit and Video Wall Management System to provide support and answer any questions.

Unit Mounting

All Flat Panel Display Units will be mounted to an existing workstation in the STOC control room. Provide all brackets, mounts, or other hardware required to securely mount the Flat Panel Display Units to the workstation. Furnish parts that consist entirely of corrosion-resistant materials.

D. Acceptance Testing.

The Vendor and the Department will work together to make any necessary revisions and/or modifications to the Acceptance Test Procedure (ATP) submitted by the Vendor that will be used to demonstrate all required functionality. If, during the course of testing, Department staff determine that the Device, any associated hardware, or any other part of the System performs unfavorably or fails any part of the acceptance test; these problems will be corrected at no additional expense to the Department. The Vendor will be required to correct all deficiencies observed during the ATP within 21 calendar days of notification to the Vendor of the deficiency by the Department. Restart ATP once all problems have been corrected. If the Vendor is unable to demonstrate any of the device functionality or requirements identified in this specification or the ATP, the Department reserves the right to reject the Vendor's proposal.

E. Method of Measurement.

A complete Flat Panel Display Unit shall be measured as a unit delivered, deployed, tested, and accepted for valid operation.

F. Basis of Payment.

A complete Flat Panel Display Unit, measured as provided above, shall be paid for at the contract price for each Flat Panel Display Unit, which price shall be payment in full for completing delivery and any installation; and for all labor, tools, ground transportation, equipment, cables, connections, and incidentals necessary to complete delivery.

ATTACHMENT J
VIDEO WALL MANAGEMENT SYSTEM

A. Description.

This special provision describes furnishing a Video Wall Management System (hardware and software) capable of managing the Statewide Traffic Operations Center (STOC) Control Room Video Wall procured under this contract and up to twenty additional displays procured either under this contract or via other methods. The Video Wall will be comprised of either Flat Panel Display Units or Rear Projection Cubes installed in an array four Flat Panel Display Units/Rear Projection Cubes wide by three Flat Panel Display Units/Rear Projection Cubes tall. All Flat Panel Display Units, Rear Projection Cubes, and Flat Panel Display Units procured under this contract and managed by the Video Wall Management System are to be high definition displays with a native resolution of 1920 x 1080 pixels.

B. Materials.

Furnish a Video Wall Management System that meets or exceeds the following requirements:

Rack Mount

Furnish a Video Wall Management System that utilizes servers and/or controllers that are rack mountable in standard 19" racks.

Power

Furnish a Video Wall Management System that is capable of running on 100 volt to 220 volts Alternating Current (AC), 50 to 60 Hertz. Furnish only servers and/or controllers that have a redundant power supply. It is preferred, but not required, that all power supply units be hot swappable. All electronic components of the video wall management system should include surge protection/suppression to protect it from a spike in voltage. The Vendor should provide any available information related to energy consumption of the Video Wall Management System being proposed.

Amplifiers

The Vendor must provide all necessary video signal amplifiers required for the Video Wall and Video Wall Management System.

Operating System

Furnish a Video Wall Management System that utilizes servers running Microsoft Windows Server 2008 R2 or higher and/or controllers running Microsoft Windows 7 or higher. All Video Wall Management System servers and controllers must be 64-bit. All software procured under this contract must be capable of starting automatically when the server is booted and the operating system is started.

Display Management

Furnish a System capable of managing the Video Wall (twelve Flat Panel Display Units or Rear Projection Cubes) and up to twenty additional displays.

Account Management

Provide a System capable of establishing individual user accounts with customizable permission levels for configuration and management of the Video Wall.

User Interface
Provide a System that includes Video Wall management software with an intuitive and easy to use user interface (UI).

Processor
It is preferred, but not required, that the Video Wall Management System utilize servers and/or controllers with a minimum of two quad core processors with a minimum speed of 2.4 GHz.

Backplane
It is preferred, but not required, that the Video Wall Management System utilize servers and/or controllers with PCI Express switch fabric.

Hard Drives
It is preferred, but not required, that the Video Wall Management System utilize servers and/or controllers with a minimum of two 500 MB HDD, 7,200 RPM hard drives installed in a minimum RAID 1 configuration. It is preferred, but not required, that all hard drives should be hot swappable.

Memory
It is preferred, but not required, that the Video Wall Management System utilize servers and/or controllers with a minimum of 16 GB of Memory (RAM). All servers and/or controllers should be capable of being expanded to up to 64 GB of Memory (RAM).

Network Connection
Furnish Video Wall Management System servers and/or controllers that have a minimum of two RJ-45 10/100/1000 Base-T Ethernet ports.

USB Connection
It is preferred, but not required, that all Video Wall Management System servers and/or controllers have a minimum of four USB 2.0 ports.

Input/Output Terminals
Furnish a Video Wall Management System that comes with all of the necessary input and output terminals required to operate the Video Wall (twelve Flat Panel Display Units or Rear Projection Cubes) and up to twenty additional displays. All input and output terminals should be fully integrated into the Video Wall Management System; no connection conversion devices will be permitted. At a minimum, furnish a Video Wall Management System that has the following terminals:

- Input Terminals:
  - Digital: 32 (DisplayPort, HDMI, or DVI-D)
  - Analog: 16 (VGA (15 Port) or Component)
- Output Terminals:
  - Digital: 32 (DisplayPort, HDMI, or DVI-D)

Runtime
Furnish a Video Wall Management System server(s) and/or controller(s) that are capable of running 24 hours per day, 7 days a week, and 365 days per year.

Environmental Operating Conditions
Furnish a Video Wall Management System that is capable of operating in temperatures ranging from 50 degrees Fahrenheit to 86 degrees Fahrenheit (10 degrees Celsius to 30 degrees Celsius). Furnish a Flat Panel

Display Unit that is capable of operating under a relative humidity ranging between 20 percent and 80 percent.

Display Management
Furnish a Video Wall Management System that is capable of managing the Flat Panel Display Units or Rear Projection Cubes and any additional standalone Flat Panel Display Units procured under this contract. It is preferred, but not required, that the Video Wall Management System be capable of automatically or manually adjusting the settings (color, contrast, brightness, and/or image location/alignment) of each Flat Panel Display Unit/Rear Projection Cube such that each Flat Panel Display Unit/Rear Projection Cube matches the visual appearance and picture alignment of all of the others in the Display Wall. The Video Wall Management System must be capable of being managed by software that can be installed or accessed from all computers in the STOC control room. While not required, it is preferable that the Video Wall Management System be capable of being managed and/or controlled by a tablet running Apple's latest iOS operating system or Google's latest Android operating system.

Error Detection and Alert
It is preferable, but not mandatory, that the Video Wall Management System be capable of receiving error or failure information for the Flat Panel Display Units or Rear Projection Cubes procured under this contract. It is preferable, but not required, that the Video Wall Management System be capable of automatically correcting the error/failure or notifying STOC personnel of the error or failure via email.

Cabling
Furnish all necessary cabling required for normal Video Wall Management System operations. Cabling will include all power cables, video cables, and any audio cables required to connect the Video Wall Management System to the Flat Panel Display Units and Rear Projection Cubes procured under this contract. All cables used to connect the Video Wall, Flat Panel Display Units, and Rear Projection Cubes to the Video Wall Management System must utilize a digital signal; cables using an analog signal will not be permitted. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

Reliability
Furnish a Video Wall Management System with servers and/or controllers with a minimum Mean Time before Failure (MTBF) of 60,000 hours. Provide any available MTBF calculations as part of the proposal.

User Manual
Furnish four hard copies and four PDF copies on CD of the User's Manual for the Video Wall Management System. The User's Manual should include comprehensive instructions to setup, operations, and troubleshooting the Video Wall Management System.

System Training
Provide two half-day (four hour minimum) training sessions, hosted by qualified instructors, for Department personnel and any representatives (maximum of 20 people in total) describing the System and all required features and functionality. Provide detailed instructions on System operations and any materials required for training System users to the Department for approval at least twenty-one (21) days prior to the proposed anticipated start of the training sessions. Department approval of the material will be required prior to scheduling the training sessions. Conduct all training sessions at locations determined by the Department. Provide both formal classroom lectures as well as "hands-on" training to all participants. Provide "Hands-on" training that includes working directly with the System.

Warranty

Furnish a Video Wall Management System with a minimum warranty of three years from the date of approval of the Acceptance Test Procedure by the Department. Repair and/or replace, at no cost to the Department, any and all hardware that fails to operate as specified within 10 business days of notification by the Department of the failure.

Service and Support

Provide customer service and support for the Video Wall Management System during normal business hours, Monday through Friday, with an email and phone contact provided for the duration of the warranty period and/or service and support contract. Troubleshoot and/or repair, at no cost to the Department, any and all hardware or software components that fail to operate as specified within 5 business days of notification by the Department of the failure.

C. Construction Methods.

Deliver the Video Wall Management System to the Department, or Department representative designated on individual purchase orders. Provide a representative during installation and configuration of the Video Wall and Video Wall Management System to provide support and answer any questions.

Unit Mounting

Provide all brackets, mounts, or other hardware required to securely mount all hardware components of the Video Wall Management System. Furnish parts that consist entirely of corrosion-resistant materials.

D. Acceptance Testing.

The Vendor and the Department will work together to make any necessary revisions and/or modifications to the Acceptance Test Procedure (ATP) submitted by the Vendor that will be used to demonstrate all required functionality. If, during the course of testing, Department staff determine that the Device, any associated hardware, or any other part of the System performs unfavorably or fails any part of the acceptance test; these problems will be corrected at no additional expense to the Department. The Vendor will be required to correct all deficiencies observed during the ATP within 21 calendar days of notification to the Vendor of the deficiency by the Department. Restart ATP once all problems have been corrected. If the Vendor is unable to demonstrate any of the device functionality or requirements identified in this specification or the ATP, the Department reserves the right to reject the Vendor's proposal.

E. Method of Measurement.

A complete Video Wall Management System shall be measured as a unit delivered, deployed, tested, and accepted for valid operation.

F. Basis of Payment.

A complete Video Wall Management System, measured as provided above, shall be paid for at the contract price for the Video Wall Management System, which price shall be payment in full for completing delivery and any installation; and for all labor, tools, ground transportation, equipment, cables, connections, and incidentals necessary to complete delivery. The cost proposal must clearly identify all costs to be incurred by the Department during System deployment and System operations during the first year. Deployment and first year costs should include all one-time costs (e.g. software purchase), the cost for all hardware or software licenses, any annual costs associated with System operation during the first year (e.g. Software service, support, and maintenance).

ATTACHMENT K
CONTROL ROOM AUDIO SYSTEM

A. Description.

This special provision describes furnishing an Audio System for the Statewide Traffic Operations Center (STOC) Control Room. The Audio System will be comprised of an Audio Management System, four wall mounted control room speakers, six sets of multi-media workstation speakers, six AM/FM/Weather tuners, and six four-channel stereo mixers.

B. Materials.

Furnish a Control Room Audio System that meets or exceeds the following requirements:

1) Audio Management System

Management System

Provide an Audio Management System that is capable of managing audio distribution to the audio equipment procured under this contract.

Input/Output Terminals

Furnish an Audio Management System that comes with all of the necessary input and output terminals required to operate the Audio System. All input and output terminals should be fully integrated into the Audio System; no connection conversion devices will be permitted. At a minimum, furnish an Audio System that has the following terminals:

- Input Terminals:
  - Minimum of 12 input terminals
- Output Terminals:
  - Minimum of 12 output terminals

Amplifiers

The Vendor must provide all necessary audio signal amplifiers required for the Audio Management System.

Cabling

Furnish all necessary cabling required for Audio Management System operations. Cabling will include all power cables and audio cables required to connect the Audio System devices procured under this contract. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

User Manual

Furnish four hard copies and four PDF copies on CD of the User's Manual for the Audio Management System. The User's Manual should include comprehensive instructions to setup, operations, and troubleshooting the Audio Management System.

Warranty

Furnish an Audio Management System with a minimum warranty of one year from the date of approval of the Acceptance Test Procedure by the Department. Repair and/or replace, at no cost to the Department, any and all hardware that fails to operate as specified within 10 business days of notification by the Department of the failure during the warranty period.

Service and Support
Provide customer service and support for the Audio System during normal business hours, Monday through Friday, with an email and phone contact provided for the duration of the warranty period and/or service and support contract. Troubleshoot and/or repair, at no cost to the Department, any and all hardware or software components that fail to operate as specified within 5 business days of notification by the Department of the failure during the warranty period.

2) Control Room Speakers

Speakers
Furnish four control room speakers that will be mounted to the wall in the STOC control room. Each speaker will be mounted in one corner of the control room.

Output
Furnish control room speakers that are capable of providing a minimum output of 50 Watts per speaker.

Amplifiers
The Vendor must provide all necessary audio signal amplifiers required for the control room speakers.

Cabling
Furnish all necessary cabling required to connect the wall-mounted, control room speakers. Cabling will include all power cables and audio cables required to connect the speakers to the Audio Management System. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

Mounting
Provide all brackets, mounts, or other hardware required to securely mount the speakers to the wall. Furnish parts that consist entirely of corrosion-resistant materials.

3) Multi-Media Workstation Speakers

Speakers
Furnish six sets of multi-media speakers; each set is to include two speakers, for the STOC control room workstations. Each speaker set should include at least one volume dial and a headphone jack.

Output
Furnish multi-media speakers that are capable of providing a minimum output of 10 Watts per speaker.

Power
Furnish multi-media speakers that are capable of running on 100 volt to 220 volts Alternating Current (AC), 50 to 60 Hertz.

Cabling
Furnish all necessary cabling required to connect the multi-media speakers. Cabling will include all power cables and audio cables required to connect the speakers to the Audio Management System. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

4) AM/FM/Weather Tuner

Tuner

Furnish six tuners, one for each of the STOC control room workstation, that are capable of receiving AM, FM, and Weather transmissions.

Power

Furnish tuners that are capable of running on 100 volt to 220 volts Alternating Current (AC), 50 to 60 Hertz.

Amplifiers

The Vendor must provide all necessary audio signal amplifiers required for the AM/FM/Weather tuner.

Antenna

The Vendor must provide an antenna for each tuner with sufficient strength to obtain an AM, FM, and weather signal.

Cabling

Furnish all necessary cabling required for the tuner. Cabling will include all power cables, audio cables, and antenna cables required to connect the tuner to the Audio Management System. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

5) Four-Channel Stereo Mixer

Mixer

Furnish six stereo mixers, one for each of the STOC control room workstations.

Audio Channels

Each stereo mixer should have a minimum of four audio input channels.

Volume Control

Each stereo mixer should have a volume dial for each audio channel as well as a master volume dial.

Audio Control

Each stereo mixer should have a dial to control the audio bass and the audio treble.

Power

Furnish stereo mixers that are capable of running on 100 volt to 220 volts Alternating Current (AC), 50 to 60 Hertz.

Amplifiers

The Vendor must provide all necessary audio signal amplifiers required for the stereo mixer.

Cabling

Furnish all necessary cabling required for the stereo mixers. Cabling will include all power cables and audio cables required to connect the stereo mixer to the Audio Management System. The Vendor should take into account the length of cable needed to make all connections; no additional funds will be approved for longer cable runs.

C. Construction Methods.

Deliver the Audio System to the Department, or Department representative designated on individual purchase orders. Provide a representative during installation and configuration of the Audio System to provide support and answer any questions.

Unit Mounting

Provide all brackets, mounts, or other hardware required to securely mount the Audio System. Furnish parts that consist entirely of corrosion-resistant materials.

D. Acceptance Testing.

The Vendor and the Department will work together to make any necessary revisions and/or modifications to the Acceptance Test Procedure (ATP) submitted by the Vendor that will be used to demonstrate all required functionality. If, during the course of testing, Department staff determine that the Device, any associated hardware, or any other part of the System performs unfavorably or fails any part of the acceptance test; these problems will be corrected at no additional expense to the Department. The Vendor will be required to correct all deficiencies observed during the ATP within 21 calendar days of notification to the Vendor of the deficiency by the Department. Restart ATP once all problems have been corrected. If the Vendor is unable to demonstrate any of the device functionality or requirements identified in this specification or the ATP, the Department reserves the right to reject the Vendor's proposal.

E. Method of Measurement.

A complete Audio System shall be measured as a unit delivered, deployed, tested, and accepted for valid operation.

F. Basis of Payment.

A complete Audio System, measured as provided above, shall be paid for at the contract price for the Audio System, which price shall be payment in full for completing delivery and any installation; and for all labor, tools, ground transportation, equipment, cables, connections, and incidentals necessary to complete delivery. The cost proposal must clearly identify all costs to be incurred by the Department during Audio System deployment and System operations during the first year. Deployment and first year costs should include all one-time costs (e.g. software purchase), the cost for all hardware or software licenses, any annual costs associated with Audio System operation during the first year (e.g. Software service, support, and maintenance).

ATTACHMENT L
SYSTEM SERVICE, SUPPORT, AND MAINTENANCE

A. Description.

This special provision provides for Vendor provided service, support, and maintenance (Support) for all hardware and software included in the contract. The hardware and software included in these specifications shall collectively be referred to as the system (System).

B. Materials.

Furnish service, support, and maintenance that meet or exceed the following requirements:

Yearly Service and Support

Following the conclusion of the warranty period for the System (including all hardware and software), provide service and support to the Department for a specified annual cost. The annual cost will be applicable to the optional second, third, fourth, fifth, sixth, seventh, and eighth year of the contract. Provide service and support for the System in each optional contract year identical to the service and support provided during the warranty period; this will not include replacement of any failed hardware that occurs outside of the warranty period.

Maintenance Response Time

For each year in which the Department has a service and support agreement with the Vendor, the Vendor will be required to be onsite to diagnose any System problems, hardware failures, or software issues within 48 hours (24 hours preferred) of notification by WisDOT for all items procured under this contract. Immediately after identification or diagnosis of a problem, the Vendor will be required to provide the Department a quote to repair or replace any items not currently under warranty and the timeframe to complete any repairs.

Firmware and Software Upgrades

For the warranty period and any year in which the Department has a service and support agreement with the Vendor, the Vendor will be required to provide all firmware and software updates and/or upgrades for the hardware and software procured under this contract. New firmware and software will be provided to the Department free of charge. The Vendor will be responsible for installing all new firmware and software on devices procured under this contract. WisDOT may require the Vendor be onsite in order to complete a firmware or software installation or upgrade.

C. Method of Measurement.

Each complete year of Support shall be measured as providing all required Vendor service, support, and maintenance services for a period of one year from the date of the contract extension.

D. Basis of Payment.

Each complete year of Support, measured as provided above, shall be paid for at the lump sum contract price, which price shall be payment in full for completing a full year of support